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SIR RICHARD CARNAC TEMPLE, BART., C.I.E.,

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ERRATA.

Page 301, line 5 from bottom read, घान्देपि नन्दनवने.	Page 305 verso 1192, read ०रकेन.
Page 304 line 16 from top, read हयरोहास्ततः	Page 306 verso 1332 read जात ^२ .
Page 304 verso 1093, read पाञ्चास्यौ.	

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THE RAMACHARITAMANASA AND THE RAMAYANA.

BY L. P. TESSITORI, UDINE (ITALY).

(Continued from Vol. XLI. p. 238.)

Ayodhyākāṇḍa.

(10) The supreme desire of the old Daśaratha is that he may see Rāma's coronation in his lifetime :

C, II, 1, 32-37 (B, II, 1, 19) :

atha rājāo babbhūvai 'va vṛiddhasya chirajīvinah | prītir eshā
katham Rāmo rājā syān mayi jīvati || 36 || eshā hy asya
parā prītir hṛīdi samparivartate | kadā nāma sutam drak-
shyāmy abhishikṭam aham priyam || 37 ||

R. C. M., II, 1, 10 :

(saba ke ura abhilāshu asa . . .)
āpu achhata jubarāja-padu Rāma-
hiṁ deu naresu ||

R. C. M., II, 4, 3^a :

mohi achhata yahu hoi uchhāhū |

Tulasī Dāsa, in the first of the two quotations given above, ascribes to all the citizens what Vālmīki had ascribed to Daśaratha, but the substance is the same. The central point of the comparison is represented by the phrase *mayi jīvati*, which has been literally translated into *āpu achhata* and *mohi achhata*, and the correspondence is made still more persuasive by the fact that *āpu achhata* in the first quotation from the R. C. M. is quite superfluous and unjustifiable.

(11) Men and women in Ayodhyā, eager to see Rāma's coronation, look impatiently for the morning :

C, II, 5, 19 (B, II, 4, 19) :

tadā hy Ayodhyānilayaḥ sastribālākulo janah | Rāmābhi-
shekam ākāṅkshann ākāṅkshann udayam raveḥ || 19 || .

R. C. M., II, 11, 3^b-4^a :

kahahim parasapara loga logāi |
kāli lagana bhali ketika bārā | .

Ib. 6^a :

sakala kahahim kaba hoīhi kāli | .

(12) Vālmīki, in order to depict Mantharā's passion, makes use of the metaphors: *dahyamānd krodhena* (C, II, 7, 13) and *dahyamānd'nalena'va* (*ibid.* 21), which might have been the origin of Tulasī Dāsa's expression: (*Rāma-tilaku suni*) *bhā ura-dāhā* (II, 13, 2).

(13) It has always been a rule in the Solar race that the eldest son should be king and his younger brothers obey his commands. This argument, which Vālmīki puts forth several times in his *Ayodhyākāṇḍa* in favor of Rāma's consecration, is picked up by Tulasī Dāsa and caused to

be uttered by Kaikeyi, when she is trying to convince Mantharā that it is quite right that Rāma should be made king :

C, II, 73, 20; 22 (*B* wanting):

asmin kule hi sarveshāṃ jyeshtho rājye 'bhishichyate | aparo
bhrātaraś tasmīn pravartante samāhitāḥ || 20 || satatam
rājaputreshu jyeshtho rājā 'bhishichyate | rājūnam etat samam
tat syād Ikshvākūṇām viśeshataḥ || 22 ||

C, II, 79, 7^a (*B*, II, 86, 10):

jyeshthasya rājatā nityam uchitā hi kulasya naḥ |

C, II, 102, 2 (*B*, II, 111, 2):

śāśvato 'yam sadā dharmah sthito 'smāsu, . . | jyeshthe
putre sthite rājā na kanīyān bhaven nripaḥ || 2 || .

(14) Daśaratha stoops over Kaikeyi, who is lying on the ground full of anger, and touches her with his hands :

C, II, 10, 27^a (*B*, II, 9, 6^a):

parimrījya cha pāṇibhyāṃ . . .

R. C. M., II, 15, 3:

jeṭha svāmi sevaka laghu bhāi |
yaha dinakara-kula rīti subhāi ||

R. C. M., II, 25, 9:

parasata pāni . . .

(15) Daśaratha asks Kaikeyi who has dared to vex her and what he is to do in order to punish the offender, and says that he himself, as well as all his family, is at her disposal :

C, II, 10, 31 and *ff.* (*B*, II, 9, 10 and *ff.*):

(...vyādhim āchakshva bhāminī) | kasya vā 'pi priyam kāryam
kena vā vipriyam kṛitam || 31 || kaḥ priyam labhatām adya
ko vā sumahad apriyam | . . . || 32 || avadhyo vadhyatām
ko vā vadhyaḥ ko vā vimuchyatām | daridraḥ ko bhaved
ādhyo dravyavān vā 'py akiñchanah || 33 || ahaṃ cha hi
madhyāḥ cha sarve tava vaśā'nugāḥ | .

R. C. M., II, 26, 1-2, 5:

anahita tora priyā kei kīnhā | kehi
dui sira kehi Jama chaha līnhā |
kahu kehi rañkahi karaūm nareṣū |
kahu kehi nripahi nikāsaūm deṣū ||...
priyā prāna suta sarabasu more |
parijana prajā sakala basa tore | . . .

The passage is quite identical, even in form, in both the poems.

(16) Kaikeyi insists on demanding that the king should keep his promise and alleges the examples of others who gave their life and property to keep their word. This we find in both the poems, only the examples quoted differ, as Vālmīki (*C*, II, 12, 43 and *ff.*; *C*, II, 14, 4 and *ff.*; *B*, II, 11, 4 and *ff.*) quotes those of Ābhi, Alarka and Sāgara, whilst Tulasi Dāsa (*II*, 30, 7, quotes those of Ābhi, Dadhichi and Bali. The example, of Bali, however, has a correspondence in the *R.* (*C*, II, 14, 11 = *B*, II, 11, 9^b-10^a).

(17) Daśaratha wishes the day of Rāma's banishment would never break :

C, II, 13, 17^b (*B* wanting):

na prabhātam tvaye 'chchhāmi niṣe nakshatrabbhūshite || 17 ||

R. C. M., II, 37, 2^a:

(bhuālū) . . . hṛidaya manāva
bhora jani hoī |

(18) On the morning of the day fixed for the coronation, Rāma is called to the king's presence, where, seeing his father lying on the ground in a miserable condition and not being addressed by him, he begins to suspect that the king must be angry with him, and asks Kaikeyi what is the offence which has made his father angry :

C, II, 18, 11 (*B*, II, 15, 18):

kachchin mayā nā 'paraddham ajñānād yena me pitā | kupitaś
tan mamā 'chakshva . . .

R. C. M., II, 42, 7^bs:

bhā mōhi teṃ kachhu baḍa aparā-
dhū || tā teṃ mōhi na kahata kachhu
rāū | mori sapatha tohi kahu sati-
bhāū |

(19) In the *R. C. M.* (II, 44, 9-10) Daçaratha prays Çiva that Râma may disregard his command and refuse to go to the woods. The same wish Vâlmiki ascribes to Daçaratha in the *R. C.* (II, 12, 88).

(20) Râma, in order to dissuade Sîtâ from her resolution to follow him to the exile, draws a sketch of the hardships of the forest, insisting particularly on the following points: (1) sleeping on the bare ground; (2) wearing bark-garments; (3) living on fruits, bulbs and roots and fasting occasionally when that natural food is scanty:

C. II, 28, 11 and π (*B.* II, 28, 20 and π):

supyate paragaçayyâsu svayambhagnâsu bhûtale | . . .
|| 11 || ahorâtram cha samtoshah kartavyo niyatâtmanâ |
phalair vrikshâvapatisaiḥ . . . || 12 || upavâsac cha
kartavyo . . . | jaṭabhâraç cha kartavyo valkalâmbara-
dhâraṇam || 13 || . . . || yathâlabdhena kar-
tavyah samtoshas . . . | yathâ 'hârsair vanacharaiḥ
. . . || 17 ||

R. C. M., II, 62, 9-10:

bhûmi-sayana balakala-basana asana
kanda-phala-mûla | te ki saçâ saba
dina milahim samaya samaya anu-
kûla ||

The last point is better developed in:

B. II, 28, 22 (*C.* wanting):

vaneshv alabhyamâne cha vanye mûlaphale punah | bahûny ahâni vastavyam nirâhârsair vanâçrayaiḥ
|| 22 ||.

(21) Sîtâ answers that a layer of grass will be for her the most delightful bed and that fruits and roots will be as sweet as ambrosia, provided she be near Râma:

C. II, 30, 14-15 (*B.* II, 30, 16-17):

çâdvaleshu yadâ çigye vanântarvanagocharâ | kuthâstara-
ṇayukteshu kiṃ syât sukhataram tataḥ || 14 || patram
mûlam phalam yat tu alpam vâ yadi vâ bahu | dâsyase
svayam âhritya tan me 'mritarasopamam || 15 ||

R. C. M., II, 66, 28^a:

kusa-kisalaya-sâthart suhâi | pra-
bhu-saṃga mañju Manoja-turâi ||
kanda mûla phala amia ahârû |

and protests she will never get weary on the way:

C. II, 30, 11^a (*B.* II, 30, 12^a):

na cha me bhavitâ tatra kaçchit pathi pariçramah | .

R. C. M., II, 67, 1^a:

mohi maga chalata na hoibi hârt | .

(22) After Sîtâ has been given permission to follow her spouse, Lakshmaṇa grasps his brother's feet, wishing to be allowed to accompany him:

C. II, 31, 1 and π (*B.* II, 31, 4 and π):

evam çrutvâ sa samvâdam Lakshmaṇaḥ pûrvam âgataḥ |
bâshpaparyâkulamukhaḥ çokam soḍhum açeknuvan || 1 ||
sa bhrâtuç charaṇau gâḍham nipîdya Raghunandanah . . .

R. C. M., II, 70, 1-2:

samâçbûra jaba Lachhimana pâyê |
byâkula bilasha-badana uṭhi dhâye |
kampa pulaka tana nayana sanfrâ |
gahe charana ati-prema adhrâ ||

(23) In the *R. C. M.* Sumitrâ instructs Lakshmaṇa to take heed that Râma and Sîtâ live happily in the woods and forget their father, mother, friends and relations and the pleasures of the city. This can be traced back to a passage in the *R.* where Sîtâ says she will never think, while in the woods, of her parents, nor of the palace, which she has renounced:

C. II, 30, 16 (*B.* II, 30, 18):

na mâtur na pitus tatra smarishyâmi na veçmanah | .

R. C. M., II, 75, 9-10:

upadesa yaha jehi jâta tumhare
Râma Siya sukha pâvahim | pitu-
mâtu-priya-parivâru-pura-sukha su-
rati bana bisarâvahim ||

(24) Sumitrā instructs Lakshmaṇa to regard Rāma as Daśaratha, Sītā as herself and the forest as Ayodhyā:

C. II, 40, 9 (*B.* II, 39, 118-12^a):

Rāmaṁ Daśarathaṁ viddhi māṁ viddhi Janakātma-jām |
Ayodhyāṁ aṣṭvīm viddhi

R. C. M., II, 74, 23^a:

tāta tumhāri mātu Baidehī | pitā
Rāma saba bhānti sanchi || Avadha
tabām jaham Rāma-nivāsū | . .

(25) The citizens accompanying Rāma into the exile awake in the morning after the first halt, and, not seeing Rāma any more, burst into lamentations, and cursing their lives bereft of Rāma, pray to die:

C. II, 47, 7 (*B.* wanting):

iha' va nidhanam yāma mahāprasthānam eva vā | Rāmeṇa
rahitānām no kim artham jīvitaṁ hitam || 7 || . . . itā 'va
.. | vilapanti

R. C. M., II, 86, 56-74:

dhiga jivana Raghubīra-bihīnā |
jaum pai priya-biyoga Bidhi kinhā |
tau kasa marana na māṅge dīnā ||
ehi bidhi karata pralāpa-kalāpā | . . .

(26) Rāma, when taking leave of Sumantra, implores him to do everything in his power so that the king may not grieve on his account:

C. II, 52, 22^b (*B.* wanting):

yathā Daśaratho rājā māṁ na ṣochet tathā kuru || 22 ||.

R. C. M., II, 96, 2:

saba bidhi soi karatabya tumhāre |
dukha na pāva pitu socha hamāre ||.

(27) Sītā's prayer to the Gaṅgā:

C. II, 52, 83^b and π. (*B.* II, 52, 17 and π.):

Vaidehi prāñjalirbhūtvā tāṁ nadīm idam abravīt || 83 ||
putro Daśarathasyā' yaṁ mahārājasya dhīmataḥ | nideṣam
pālayatv enaṁ Gaṅge tvadabbhīrakshitāḥ || 83 || chaturdaśa
hi varshāṇi samagrāṇy ushya kānane | bhrātrā saha mayā
chai 'va punaḥ pratyāgamishyati || 84 || tatas tvam devi
subhage kahemeṇa punar āgatā | yakshye prameditā Gaṅge
sarvakāmasampriddhinī || 85 || punar eva
mahābāhur mayā bhrātrā cha saṁgataḥ | Ayodhyāṁ vanavā-
sāt tu praviṣatv anagho 'naghe || 91 ||.

R. C. M., II, 103, 2-3:

Siya Surasarihim kahen kara jorī
mātu manoratha puraūbi morī ||
pati devara saṁga kusala bahorī |
āi karaūm jehi pūjā torī ||.

(28) Sumantra, on his return after having accompanied the three exiles to the woods, relates to Daśaratha Rāma's and Lakshmaṇa's messages:

B. II, 58, 22 and π. (*C.* II, 58, 21 and π.):

. . . vaktavyo Bharato vachanān mama | . . . || 22 || tvayā
ṣṇurūshyamāṇo māṁ na ṣochati yathā nripaḥ | matsnehād
arhasi tathā kartum ity api niṣchayam || 23 || samam
mātrīshu sarvāsu vartethā iti chā' bravīt | . . . || 24 || 25 ||
ishadrosha paritas tu Saumitrir idam abravīt | . . .

R. C. M., II, 152, 3^a and π.

kahaba saṁdesu Bharata ke
āye | . . .
seyehu mātu sakala sama
j nī ||
tāta bhānti tehi rākhaba rāū
socha mora jehi karaī na kād ||
Lashana kabe kachhu bachana
kathorā | . . .

As regards Sītā, both in the *R.* and in the *R. C. M.*, Sumantra says she was so moved that she could utter no words. The correspondence is so much the more significant as neither Vālmiki nor Tulasi Dāsa had mentioned Sītā when describing Sumantra's taking leave from the exiles. Had

not Tulasi Dāsa kept strictly close to the *R.*, it would be difficult to explain as a mere chance that he should have made the same omission as his predecessor had :

B. II, 58, 34 and 5. (*C.* II, 58, 34 and 5.) :

Jānak tu viniṣvāsa bāṣpachchhannasvarā nṛpa | bhūto-
pasriṣṭachitte'va vīkṣamāṇā samantataḥ || 34 || adṛiṣṭapūr-
vavyasanā rājaputrī yaçasvinī | paryācruvanā dinā nai 'va
mām kinchid ābravit || 35 || udīkṣamāṇā bhartāraṃ
mukhena pariṇuśyatā. | mumocha kevalaṃ bāṣpaṃ mām
nirvṛttam avekṣhya sā || 36 ||.

R. C. M., II, 152, 9-10 :

kahi pranāma kacchu kahana liya
Siya bhai sithila saneha | thakita ba-
chana lochana sajala pulaka-pallavita
deha ||.

(29) The fastening up their hair, after the mode of the ascetics, which the exiles had adopted before crossing the Gaṅgā (*B.* II, 52, 2 and 5. = *C.* II, 52, 68 and 5.) is not mentioned by Tulasi Dāsa in its proper place. But he does not omit this particular in Sumantra's relation to Daśaratha of what the exiles had done before he took his leave of them :

R. C. M., II, 151, 2 :

hota prāta baṭa-chhīra maṅgavā | jaṭā-mukṣa nija sīsa banāvā ||

where *maṅgavā* is perhaps sufficient to show that Tulasi Dāsa had before his mind the above-cited passage of the *R.*, where Rāma gives Guha the command: *nyagrodhakṣhram ānaya* (*B.* II, 52, 2 = *C.* II, 52, 68).

(30) Sumantra goes on to relate how his horses, after Rāma's departure, kept on looking in the direction in which Rāma had disappeared and neighing and shedding tears :

B. II, 59, 4 (*C.* II, 59, 1) :

tato mama nirvṛttasya turagā bāṣpaviklavāḥ | Rāmam
evā'nupaṇyanto heshamāṇā vichukruṣuḥ || 4 ||.

R. C. M., II, 142, 8^a, 9 :

dekhi dakhina-disi haya hihināhīm |
... || nahīm tṛina charahīm na
piyahīm jala mochahīm lochana-
bāri |.

(31) Tulasi Dāsa's account of what happened after Daśaratha's death harmonizes perfectly in its main lines with Vālmiki's description, though the latter is of course much more diffuse. In fact the succession of the particulars is exactly the same in the *R. C. M.*, as in the *R.*, viz.: (1) lamentations of the women in the seraglio (*B.* II, 68, 50-51; *C.* II, 66, 16-23; *R. C. M.*, II, 156, 3-4); (2) affliction of the citizens and their lamentations (*B.* II, 68, 52-55; *C.* II, 66, 24-29; *R. C. M.*, II, 156, 5-9); (3) the breaking of the day and the gathering of the council (*B.* II, 69, 1; *C.* II, 67, 1-2; *R. C. M.*, II, 156, 8).

Moreover, there are in this passage of the *R. C. M.* two unquestionable reminiscences of the *R.*, to wit, where Tulasi Dāsa says the citizens regretted that the sun of the Solar race had set and where he says that everybody was abusing Kaikeyi. They can be traced back to the following passages of the *R.* :

B. II, 68, 54 (*C.* II, 66, 28) :

hataprabhā dyaus iva bhāskaraṃ vinā . . . | rarāja sā nai'va bhṛīṇaṃ mahāpuri . . .

B. II, 68, 55 (*C.* II, 66, 29) :

narāḥ cha nāryaḥ cha bhṛīṇārtamānasā vigarhayanto Bharatasya mātaram | . . .

(32) Bharata's hasty travel from Rājagriha to Ayodhyā, which is described at length by Vālmiki (*B.* II, 73; *C.* II, 71), is condensed to less than within only half a *chāupdi* by Tulasi Dāsa :

R. C. M., II, 158, 1.

chale samīra-bega haya hāmke | nāghata sarita saila bana bāmke |

but that half *chāupdi* contains a complete summary of what Vālmiki says in his fuller account, where Bharata is likewise represented as crossing rivers, forests and mountains, fatiguing his horses and vying in speed with the wind. As to this last point, namely, the comparison of Bharata's

speed to that of the wind, I think it is sufficient to prove that Tulasi Dāsa, when writing his *chale samira-bega*, had in mind the following *śloka* of the *R.* :

B. II, 73, 7 (*C.* II, 71, 8) :

rājaputro mahābāhur atitkṣhṇopācchitam |

bhadraṃ bhadreṇa yāneṇa Mārutaḥ kham ivā 'bhyayāt || 7 ||.

(33) Tulasi Dāsa relates how Kaikeyī, seeing Bharata greatly disconcerted on hearing of Rāma's banishment, tried to console him with words, the only result of which was to exasperate him more and more, like salt applied to a burn :

R. C. M., II, 161, 1 :

bikala biloki sutahi samujhāvati | manahum jare para lona lagāvati |

Now the example of the salt applied to a wound to indicate pain added to pain is found in the *R.* in Bharata's talk to Kaikeyī ; in fact, in both poems it occurs in the same situation, just as in both it refers to Bharata's grief :

B. II, 75, 15^a :

vraṇe kṣhāraṃ vinikṣhīptaṃ duḥkṣhe duḥkṣham nīpātitaṃ |

(*C.* II, 73, 30 :

duḥkṣhe me duḥkṣham akaror vraṇe kṣhāraṃ vā 'dadāḥ |).

(34) Tulasi Dāsa relates how Bharata in the couch of *kuṣa*, on which Rāma and Sitā had slept under the tree at Ṣṛīngavera, discovered some *kanakabindavaḥ* from Sitā's ornaments and placed them reverently upon his head. The same discovery Bharata makes in the *R.*, and it is noteworthy that the two poems agree not only in that particular, but even in the use of the same term : *kanakabindu* :

B. II, 96, 18 (*C.* II, 88, 14) :

manye sabbharaṇā sūptā yathā svabhavane purā | tatra tatra
hi dṛiṣyante cīrṇāḥ kanakabindavaḥ || 16 ||.

R. C. M., II, 199, 5 :

kanaka-bindu dai chārīka dekhe |
rākhe sīsa Sīya sama lekhe |.

(35) Vālmiki says that Bharata, on his way to the woods to take back Rāma, in the *maitramuhūrta* (*viz.* in the third *muhūrta* from the rising of the sun), along with his retinue entered Prayāga after having crossed the Gaṅgā. From this statement it can be inferred that the crossing of the river lasted two *muhūrtas*. Tulasi Dāsa keeps strictly close to Vālmiki's computation of the time :

B. II, 97, 27 (*C.* II, 89, 21) :

sā sarvā dhvajant Gaṅgāṃ dāsaiḥ saṃtāritā tadā | maitre
muhūrte prayayau Prayāgavanam uttamam || 27 ||.

R. C. M., II, 202, 90 :

daṇḍa¹⁵ chārī maham bhāsaba pāṛā |

R. C. M., II, 203, 90 :

Bharata tīsare pahara kham kīṇha
prabesa Prayāga |.

(36) Tulasi Dāsa narrates how Rāma, at the sight of the sadness of the citizens in Bharata's retinue, took pity on them, and by embracing them all removed their grief ; and then admonishes his readers not to marvel at the Lord's power to embrace in a moment such an immense multitude (*R. C. M.*, II, 244, 1-4). Even this particular, pervaded as it seems by Tulasi Dāsa's peculiar mannerism, can be traced back to the following passage of the *R.* :

B. II, 111, 51 (*C.* II, 103, 47) :

tān nārān bāṣpapūṛṇākṣhān samikṣhya cha suduḥkṣhitān |

paryashvajata dharmajñāḥ pīṭṛivaṇ mātṛivaḥ cha saḥ || 51 ||.

¹⁵ A *daṇḍa* is about 24 minutes, i. e., half the time of a *muhūrta*, which is about 48 minutes.

(37) The words with which Râma is informed of Dagaratha's death are qualified by Tulasi Dâsa as *kulisa-kaphora* . . . *kafu bânî* | (*R. C. M.*, II, 247, 5a): Vâlmiki in the corresponding passage has the same image of the thunderbolt, only more developed :

B., II, 111, 9-10 (*C.*, II, 103, 23) :

tam tu vajram ivo' tṛṣṭam ābave Dānavāriṇā |
vāgvajram Bharateno 'ktam amanojñam niçamyā tu || 9 ||
pragṛihya bāhū Rāmo 'tha pushpitāgro drumo yathā |
vane paraçunā kṛttas tathā bhūmau papāta saḥ || 10 || .

(38) Bharata before taking any deliberation consults Râma's sandals:

B., II, 127, 13-17 (*C.*, II, 115, 23-24) :

tatas tu Bharataḥ ṛṣimān abhiśichyā' rypādūke | sa lālavya-
janam tatra dhārayāmāsa cha avayam || 16 || pādūke tv
abhiśichyā'tha Nandigrāme purottame, | Bharataḥ çisanam
sarvam pādūkābhyām nyavedayat || 17 || .

R. C. M., II, 325, 9-10 :

nita pūjata prabhu-pāmvarī prīti na
hṛdaya samāti | māṅgi māṅgi
āyasu karata rāja-kāja bahu bhām-
ti || .

(39) The scratching of the ground with one's toes, which Tulasi Dâsa more than once mentions as a token of grief, is also found in the *R.* I quote for the comparison two passages from the *Ayodhyākāṇḍa* :

B., II, 80, 15 (*C.* wanting) :

tam avākçirasam bhūmim charaṇāgreṇa Rāghavam |
vilikhantam uvācchā' rtaṃ Vasishṭho bhagavān rishih || 15 || .

R. C. M., II, 281, 6^b :

mahi nakha likhana lagim saba
sochana || .

Araṇyakāṇḍa.

(40) Tulasi Dâsa begins the Araṇyakāṇḍa by saying that he has already sung the great affection shown by the citizens and Bharata, and that he will thenceforward sing the acts that Râma wrought in the forest. No doubt Tulasi Dâsa refers here to the *sarga* 105 of the *Ayodhyākāṇḍa* in *B.*, where Vâlmiki describes Râma's and Sitâ's pastimes in a cave of the Chitrakūṭa and then the episode of the crow. Tulasi Dâsa joins the two parts together, condensing the first part within a single *chaupdi* and describing the second one at some length, but with great alterations. Here is the *chaupdi* replacing the first part of the *sarga* :

R. C. M., III, 1, 3-4 :

eka bāra chuni kusuma subhāye | nija kara bhūṣhana Rāma banāye |
Sītābhi pahirāye prabhu sādara | baiṭhe phaṭika-silā para sundara ||

With the few touches above Tulasi Dâsa sums up imperfectly the whole substance of the verses *B.*, II, 105, 1-30, in which it is described how Râma, after showing Sītâ the Chitrakūṭa and the Mandâkinî, entered with her into a cave in the mountain, sat down upon a rock (*çildpatṭa*, *çild*) to take rest, and then placed the *tilaka* on her with his finger, which he had rubbed on a piece of arsenic, and adorned her hair with flowers.

The second part of the *sarga*, namely the episode of the crow (*B.*, II, 105, 33-53), is narrated somewhat differently by Tulasi Dâsa. The crow for Tulasi Dâsa is none else than Jayanta, Indra's son, in the disguise of a bird. There is no mention of Jayanta in *B.*, II, 105; but in another passage of the *R.* (common to *C.*, *B.*), where the same episode is repeated, we find Tulasi Dâsa's version, which is certainly a later interpretation of the episode :

B., V, 68, 9 (*C.*, V, 67, 10) :

sutah kila sa Çakrasya vāyasah patatām varah |

Tulasi Dâsa maintains the point of the loss of one eye, but does not explain it as Vâlmiki does, so that the fact looks strange and obscure in the *R. C. M.*, as a reader who is not acquainted with

the *R.* will not be able to see the precise reason for which the crow had to be deprived of one eye, but will think it a punishment in open contrast with the Lord's mercy, to which the crow had just appealed.

(41) In the *R.*, after Çarabhaṅga's ascent to heaven, a great multitude of ascetics flock to Rāma from every side and implore his protection from the *rākshasas* who are infesting the forest. And in the course of their appeal they say to him :

B. III, 10, 17^b-18^a (*C.* III, 6, 16) :

chi paçya çarirāgi muninām bhāvitātmanām || 17 ||

batānām Rāma rakshobhir bahūnām bahudhā vane |

Tulasī Dāsa catches the allusion given by Vālmiki, and vivifies the image by making Rāma actually see heaps of bones in the forest and ask the ascetics in his company about them :

R. C. M., III, 11, 6 :

asthi-samūha dekhi Raghurāyā | pūchhā muninha lagi ati-dāyā || .

(42) Agastya advises Rāma to take up his abode in the Pāñchavati in order to protect the ascetics there :

B. III, 19, 21^b = *C.* III, 13, 20^b :

api chā 'tra vasan Rāma'tāpasān pālayishyasi || 21 || .

R. C. M., III, 15, 17 :

bāsa karahu taham Raghu-kulā-
rāyā | kijiya sakala muninha para
dāyā | .

(43) Çūrpaṇakhā presents herself to Rāma after having assumed a beautiful form and addresses him with a gentle smile :

B. III, 23, 25 (*C.* wanting) :

sā 'bhigamya mahābāhuṃ bhūtvā vai kāmārūpiṇi | strisva-
bhāvaṃ puraskṛitya sasmitaṃ vākyam abravīt || 25 ||

R. C. M., III, 19, 7 :

ruchira rūpa dhari prabhu pahim
jāi | boli bachana bahuta musukāi

Mark how literal Tulasī Dāsa's rendering of the passage is.

(44) Tulasī Dāsa goes on to describe how Rāma, upon hearing Çūrpaṇakhā's proffer of herself, looked at Sitā, and then in reply advised the *rākshasi* to court Lakshmaṇa, who was still a bachelor. Though Rāma's act of looking at Sitā might admit of various explanations, even without referring to the *R.* (see Baija Nātha's commentary), yet there is no doubt that Tulasī Dāsa has borrowed it from Vālmiki's corresponding passage :

B. III, 23, 45 (*C.* wanting) :

etat tu vachanaṃ śrutvā rākshasī hy atidāruṇam | kṣhām
chakre tadā Sitāṃ Lakshmaṇaṃ cha mahābbajah || 45 || .

R. C. M., III, 19, 11^a :

Sītahi chitai kaṭi prabhu bātā | .

(45) According to the *R.*, the *rākshasas* make two expeditions to avenge the disfigured Çūrpaṇakhā : the first one of 14 men, the second one of 14,000 men. Tulasī Dāsa fuses both expeditions together into a single one of 14,000 men. Seeing the big *rākshasa* army nearing, Rāma enjoins his brother to take Sitā into a cave. Lakshmaṇa obeys and starts at once with Sitā, taking his bow and arrows in his hand :

B. III, 30, 16 (*C.* III, 24, 15) :

evam uktas tu Rāmeṇa Lakshmaṇaḥ saha Sītayā , çarān
ādāya chūpaṃ cha guhāṃ durgāṃ upāçrayat || 16 ||

R. C. M., III, 20, 12 :

rahehu sajuga suni prabhu kai
bāni | chale sahita Çrī sara-dhanu-
pāni ||

Then Rāma arms himself. Vālmiki says he puts on his armour and therewith shines like the rising sun which has dispelled the darkness. Tulasī Dāsa has the same image of the

rising sun, but does not explain it, i.e., does not tell the reason of Rāma's being compared to the sun :

B, III, 30, 18 (C, III, 24, 17):

sa tenā 'gnā'kāṣṇa kavachena vibhūṣitaḥ | rarāja Rāmas
timiraṃ vidhūyā 'rka ivo 'ditaḥ || 18 ||

R. C. M., III, 20, 19:
... . bāla-rabhiṃ gherata
danuja |

The *rākṣhasas* become quite paralyzed with amazement at the sight of Rāma's majesty :

B, III, 30, 33 (C wanting) :

dṛiṣṭvā tu Rāghavaṃ sarve rākṣhasā yuddhadurmadaḥ |
atthitāḥ parvatasamkāṣāḥ paramaṃ vismayam gatāḥ || 33 ||

R. C. M., III, 21, 1:
prabhu biloki sara sakabhiṃ na
dāi | thakita bbaḥ rajanichara-
dhāi |

The 14,000 *rākṣhasas* rain upon Rāma weapons of every description :

B, III, 31, 6 (C, III, 25, 7):

tatas taṃ bhīmakarmāṇaṃ kruddhāḥ sarve niṣācharāḥ |
sastrair nānāvīdhākāraiḥ abhyavarāṇaṃ sudarjayam || 6 ||

R. C. M., III, 21, 19-20:
sāvadhāna hoi dhāye jāni sabala
ārāti | lāge barashana Rāma para
astra sastra baṇa bhāṃti ||

(46) Tulasi Dāsa goes on saying that the *rākṣhasas* stricken by Rāma's shafts fell to the ground like mountains. However natural may be the comparison of the monstrous bodies of the *rākṣhasas* to mountains, and however common it is both in the *R.* and in the *R. C. M.*, yet it seems to me that in the present passage of the *R. C. M.* such a comparison looks rather unjustified, and is not clear except by a reference to the corresponding passage in the *R.*, from which it is certainly derived :

B, III, 31, 25-23 (C wanting) :

kechid bāṇapravegaḥ tu nirbhinnakavaśāḥ raḇe | uchehair
gaganam āviṣya tato' gacheḥhan rasātalam || 25 || mahādri-
ṣṭikarā kārāṇ āḥjanūchalasam nibhāṇ | khecharāṇ pātayāmāsa
rākṣhasāṇ dharaṇītale || 26 ||

R. C. M., III, 22, 10:
chikkarata lāgata bāṇa | dhara parata
kudhara-samāna ||

(47) Before describing the fight with the *rākṣhasas*, Vālmiki says that the gods were in fear for Rāma on seeing him facing 14,000 foes alone. Tulasi Dāsa maintains that particular, but puts it quite out of place, as he mentions it at a time when Rāma has already nearly completed the destruction of the *rākṣhasas* :

B, III, 30, 20-21 (C, III, 24, 23-24) :

tato devareṣṭigandharāḥ siddhāḥ cha saba chāraṇāḥ | ūcheḥ
paramasamtrastā guhyakāḥ cha parasparam || 20 || chaturdaṣa
sahasraṇi rakṣasāṃ bhīmakarmaṇām | ekaḥ cha Rāmo
dharinātmā katham yuddham bhaviṣyati || 21 ||

R. C. M., II, 22, 27:
sura ḍarata caudaha sahasa preta
biloki eka Avadha-dhanī |

(48) According to Vālmiki, Rāma hurled upon the *rākṣhasas* the *gāndharaśtra*, which had the effect of dementing them in such a way that everyone saw the image of Rāma in each of his comrades, and so they all perished killing each other. Tulasi Dāsa closely follows Vālmiki's narrative :

B, III, 31, 46^b-47 (C wanting) :

tatas te rākṣhasāḥ tatra gāndharvāstreṇa mohitāḥ || 46 ||
ayaṃ Rāmas tv ayaṃ Rāma iti kālena choditāḥ | anyonyam
samare jaghnur utpatya paramāyudhaiḥ || 47 ||

R. C. M., III, 22, 28-30:
... . māyā-nātha ati-kautuka kary-
au | dekhahiṃ parasapara Rāma kari
saṃgrāma ripu-dala lari maryau ||
Rāma Rāma kahi tanu tajahiṃ
pāvahiṃ pada nirbāna |

In the above passage from the *R. C. M.* it is said that the *rākṣhasas* die crying: *Rāma! Rāma!* Now if one looks at the Hindi text only, one will not be able to find out the exact reason

of the *rākshasas*'s crying: *Rāma! Rāma!* To ascertain it one must refer to the parallel passage in the *R.*, where it is plainly said that the *rākshasas*, believing that they saw Rāma in everyone of their companions, rush upon one another crying: *ayam Rāma! 'yam Rāma!* ("this is Rāma! this is Rāma!"). That the Hindi passage is not clear without a reference to the *R.* is sufficiently proved by the fact that Mr. Growse quite misunderstood its meaning in his translation, which runs as follows: "the Lord . . . having power over all illusion, wrought a prodigy and while they were yet looking at one another he finished the battle and the army of the enemy all perished fighting crying 'Rāma Rāma' as their soul left their body; they thus attained beatitude."

(49) Rāvaṇa wants to secure Mārīcha's help for carrying off Sītā, but Mārīcha tries to dissuade him from provoking such a tremendous hero as Rāma; and says he has already tasted in battle his strength as, when smitten by a single arrow of Rāma, he was driven to a distance of a hundred *yojanas*; from that time on he has lived in continuous apprehension of Rāma's appearing and wherever he looks he sees his terrible foe:

B. III, 43, 23-34 (*C.* III, 39, 15-17):

api Rāmasahasrāṇi bhūtaḥ paṇyāmi Rāvaṇa | Rāmabhūtam
idam sarvaṃ aranyaṃ pratibhāti me || 32 || vṛkṣe vṛkṣe
cha paṇyāmi chīrakṛṣṇājināmbaram | cāraḥāpadharam Rā-
mam pāḥastam ivā 'ntakam || 33 || Rāmam evā 'nupaṇyāmi
rahitesv ākuleṣu cha | dṛṣṭvā svapnagato Rāmam udbhra-
māmi vichetanā || 34 ||.

R. C. M., III, 27, 7:

bhāī mama kṛṣa bhṛṅga ki nātā
jabaṃ tabaṃ main dekhaūṃ dou
bhāī |.

(50) In the *R.* Rāvaṇa menaces Mārīcha with death, who declines to help him out of fear of Rāma, and gives him to a choice: either a probable death at the hands of Rāma, or a most certain death at his own hands, in case he should refuse to obey:

B. III, 44 31, (*C.* III, 40, 27):

āsādyā tam jīvitasatpṇayo vā mṛityuḥ dhravas te 'dya mayā virudhya | evaṃ yathāvad viga-
ṇayya buddhyā yad rochate tat kuru yach cha pathyam || 31 ||

It is clear that Tulasi Dāsa had before his mind that alternative, when he wrote that Mārīcha resolved to obey, after having seen that either way he must die:

R. C. M., III, 28, 5:

ubbaya bhānti dekhā nija maraṇā | taba tākesi Raghunāyaka-saraṇā |.

(51) The apparition of the golden deer in the hermitage, Sītā's longing for its skin, Rāma's pursuit of it, the flight and death of the deer and its calling out '*Lakshmaṇa! Lakshmaṇa!*' at the moment of dying, are narrated in quite identical terms both in the *R.* and in the *R. C. M.* As a specimen of Tulasi Dāsa's close dependence on Vālmiki's narrative in this episode, I quote the parallel passages, describing the trick of the deer of keeping itself now near, now far, now in sight, now hidden, in order to take Rāma lure away:

B. III, 50, 4-7^a:

sa cha Rāmabhayodvigno Mārīcho Daṇḍake vane || 4 || babhū-
vāntarhitā tatra kehaṇāt punar adṛiṇyata | asho 'yam ayam
eti 'ti vegavān Rāghavo yayau || 5 || muhūrtād eva dadṛiṇe
muhūrtān na prakāṣate | atirīṭṭa ishutrāsāl lobhayan sa Ra-
ghūttamam || 6 || kvachid dṛiṣṭvā kvachin naṣṭvā kvachit
trāsāch cha vidrutā ||

R. C. M., III, 29, 12-13:

kabahuṃ nikṣṭa puni dūri parāi |
kabahuṃka, pragaṭai kabahuṃ chha-
pāi || pragaṭata durata karata chhala
bhūri | chi bidhi prabhūi gayaū-
lei dūri |.

(52) Tulasi Dāsa's description of the beauty of the Pampā forest in the spring and of its effect on the mind of Rāma, bereft of Sītā (III, 40-41), is derived from Vālmiki's *śarja* *B.* III,

79 (C. IV, 1). In this *sarga* Vālmiki, too, describes the beauty of the spring in the forest, where all nature loves and invites to love, whilst Rāma's mind becomes more and more sad at the sight :

B, III, 79, 9-10^a (C. IV, I, 22-23^a) :

vasantakālāḥ prāpto' yaṁ nānāvihagakūjitāḥ |
viṣāṅkshlvihāsaḥ mama ṣokavivardhanāḥ || 9 ||

Saumitre māṁ sduḥkhārtāṁ saṁtāpayati Manmathāḥ | . .

Tulasī Dāsa takes up this hint from Vālmiki, and developes it by representing that the God of Love himself finds Rāma tortured by separation, and encamps against him with his army ; and this gives him an occasion for describing at full length Love's army impersonated in spring (R. C. M., III, 41).

(53) According to Tulasī Dāsa the Pampā is a lake, not a river. Tulasī Dāsa lauds the purity of its water, agreeing thereby with Vālmiki, who gives the Pampā the constant epithets of *śubhajalā*, *raṁyavāṇivahā*, *śītajalā*, etc.

Kīshkindhākāṇḍa.

(54) Rāma presses to his bosom Sītā's upper garment (*uttariya*) picked up by Sugrīva :

B, IV, 5, 16 (C. IV, 6, 18) :

bṛīḍi kṛitvā tu bahuṣas tam alaṁkāram āstavat |
riniḥṣvasaṁ |
cha bahuṣo bhujāṅga iva rohitāḥ || 16 || .

R. C. M., IV, 6, 16 :
paṭa ura lāi socha ati kinhā ||

(55) In the R. C. M., Vālin reproaches Rāma of having killed him by surprise, as the huntsman kills his game :

R. C. M., IV, 10, 5^b :

māreḥu mohi byādhā ki nām |

No doubt the comparison has been suggested to Tulasī Dāsa by the following passage of the R. where Rāma explains to Vālin that, since he was nothing but a monkey, it was right on his part to kill him, as the huntsman kills his game :

B, IV, 17, 12-19 (C. IV, 18, 37b-40) :

vāgurābhīṣ cha pāṣaṣ cha kūṣaṣ cha vividhair narāḥ |
pratichchhaṁnāḥ cha dṛiṣyāḥ cha nighnanti sma bahūn mṛigān || 16 ||
prāhāvitān aviṣvātān viṣvātān apy avidrutān |
prasuptān aprasuptāṁ cha ghnanti māṁsārthīno mṛigān || 17 ||
yānti rājaraḥyaṣ chā'tra mṛigayāṁ dharmakovidāḥ |
lipyant'e na cha dosheṇa nighnanto 'pī mṛigān bahūn || 18 ||
tasmāt tvaṁ nihato yuddhe mayā bāḥena vānara |
ayudhyan pratiyudhyan vā saumya ṣākhāṁṛigo hy asi || 19 || .

(56) After killing Vālin, Rāma declines to enter Kīshkindhā, on the ground that he has promised not to enter any city or village for fourteen years. Then he enjoins Sugrīva to enter the city and make Aṅgada *gurādja* ; as for himself, he will take up his abode on the mountain close by and remain there till the rainy season, just commenced, is over :

B, IV, 25, 9 and 11 (C. IV, 26, 19 and 21) :

chatardāśasamāḥ saumya grāmaṁ vā yadi vā puram | na
pravekshyāmi Hanuman pituḥ ādeṣa esha me || 9 || 10 ||
evam uktvā Hanūmantāṁ Rāmāḥ Sugrīvam abravīt |
enam apy Aṅgadaṁ rājāṁ yanvarāḥyē 'bhishechaya || 11 ||
prathamō vārshiko māsaḥ Cṛāvaṇaḥ salilāplutāḥ | pravṛittāḥ
saumya chatvāro māsaḥ cha vārshikā ime || 12 || nā'yaṁ ud-
yogasamayāḥ praviṣa tvaṁ purim imāṁ | iha vatayāmy
śhaṁ saumya parvate nīyatendriyāḥ || 13 ||

R. C. M., IV, 13, 79 :

kaba prabhu sunu Sugrīvam harī-
sā | pura na jānuṁ dasa chāri barisā,
gata grishama barashā-ritu ā |
rahīhūm nikāṭa saila para chhāi ||
Aṅgada sabita karahu tumha
rājū |

(57) Next comes the description of the rainy season, both in the *R.* and in the *R. C. M.* (*B.* IV, 27; *C.* IV, 28; *R. C. M.*, IV, 14-16). The phenomena of nature at this time of the year give Vālmiki an opportunity for some beautiful similes between them and the persons in his poem; the same is the case with Tulasi Dāsa, only his similes are moral and theological. For example the lightning flashing amidst the clouds appears to Vālmiki as Sītā being carried off by Rāvaṇa, whilst to Tulasi Dāsa it looks like the friendship of the vile, which never lasts. Next comes the description of the autumn (*B.* IV, 29; *C.* IV, 30; *R. C. M.*, IV, 17-18).

(58) In the *R. C. M.* (IV, 25, 1) we find the statement that the monkeys sent in search of Sītā, wherever they met a *rākshasa*, killed him with a single buffet of their hand:

katabuṃ hoi nisichara soṃ bheṃtā | prāna lehiṃ eka eka chapetā |

No doubt Tulasi Dāsa generalizes here the fact of the *rākshasa* killed by Aṅgada in a mountain-cave with a blow of the palm of his hand ("talend 'bhijaghāna" *B.* IV, 48, 21; *C.* IV, 48, 20); in the *R.* there is no mention of the monkeys's coming across any other *rākshasa* on their way.

(59) Having failed to get tidings of Sītā, Aṅgada declines to turn back saying: "Should I return home without news of Sītā now that the term fixed for the return is over, Sugrīva would certainly put me to death. He has been my enemy for a long time and would be glad to profit by that transgression in order to take his revenge; it is not Sugrīva who made me *yuvardja*, but Rāma." Such is Vālmiki's meaning in this passage, which Tulasi Dāsa reproduces quite unaltered as to the substance, though more concisely as to form:

B. IV, 53, 13-14 (*C.* IV, 53, 17⁴-18⁵):

na chā'haṃ yanvarājye vai Sugrīveṇā'bhishēchitāḥ | nar-
endre nā 'bhishikto 'haṃ Rāmeṇa viditātmanā || 13 || sa
pūrvabaddhavaśiro māṃ dṛṣṭvā rājā vyatikramam |
ghātayīṣyati tikṣṇeṇa daḍḍenā 'tichirād gatam || 14 ||.

R. C. M., IV, 27, 4b-5:

uhām gaye mārīhi kapirāi || pitā
badhe para mārata mohi | rākha
Rāma nihora na ohī |.

(60) The monkeys shed tears at hearing from Aṅgada that there is no escaping from death:

B. IV, 55, 17 (*C.* IV, 55, 17⁶-18⁷):

tasya cṛtvā vachas tatra karuṇaṃ vānararabbhāḥ |
nayanebhyas ta saṣṭijar netrajaṃ vāri duḥkhitāḥ || 17 ||.

R. C. M., IV, 27, 7:

Aṅgada-bachasa sunata kapi-bhā |
boli na sakahin nayana baha nī-
rā |.

(61) At the sight of Sampāti, Aṅgada, thinking his life lost, accounts Jaṭāyu blessed for having given up his life in Rāma's service and gone to heaven:

B. IV, 56, 123-124 (*C.* IV, 56, 13):

sukhito grīhhrājās tu Rāvaṇeṇa hato raṇe || 12 || muktaḥ
cha Sugrīvabhayād gataḥ cha gatim uttamām |

B. IV, 56, 12⁸ (*C.* wanting):

dhanyaḥ sa grīhhrādhipatir Jaṭāyuh. . . .

R. C. M., IV, 28, 7-8:

kaha Aṅgada bichāri mana māhiṃ |
dhanya Jaṭāyū sama kou nāhiṃ |
Rāma-kāja kāraṇa tann tyāgi |
Hari-pura gayāṃ parama-baḍa-bhā-
gi ||.

(62) Sampāti says to the monkeys: "Take courage, according to Niçākara's prophecy, you will succeed in finding Sītā. The restoring of my wings is the best evidence in favor of the truth of that prophecy":

B. IV, 63, 15 (*C.* IV, 63, 13⁹-13¹⁰):

sarvathā kriyatāṃ yatnāḥ Sītām adhigamīṣyatha | paksha-
lambhe mamā'yaṃ vaḥ pratyakṣaṃ sampidarēṣitaḥ || 15 ||.

R. C. M., IV, 30, 2:

mohi biloki dharahu mana dhīrā |
Rāma-kṛipā kasa bhayāṃ sarirā ||.

(63) The deliberations of the monkeys on the leaping across the Ocean (*B. V, 1; C, IV, 64-65*) are faithfully reproduced by Tulasi Dāsa with his usual conciseness. Jāmbavat regrets his old age and mentions a great achievement of his youth. Aṅgada says he would leap across the hundred *yojanas*, but doubts as to his being able to leap back. Jāmbavat replies he is quite certain Aṅgada would be equal to the feat, but it is not becoming to the chief to absent himself. Then Jāmbavat turns to Hanumat and asks him why he, being the son of the Wind and equal in strength to his father, keeps sitting apart silently instead of rising up and offering himself to accomplish the task:

C, IV, 66, 2^b and 2^c (B, V, 2, 2^b):

tūshṭim ekāntam āgritya Hanūman kim na jalpaśi || 2 ||
Hanūman haritōjasya Sugrīvasya samo hy asi | . . . ||
Mārutasyau'rassh' putras tejasā chā'pi tatsamah | tvam hi
vayusuto vataḥ plavane chā'pi tatsamah || 30 || .

R. C. M., IV, 31, 3-4^a.

kahai ricchobha-pati sunu Hanu-
mānā | kā chupa sādhi rāhu nā-
balavā Pavana-tanaya bala pavana-
samānā | .

Sundarakāṇḍa.

(64) Hanumat thinks to himself: it will not be possible for him to enter the city, so well guarded by the *rākshasas*, in his natural form: he must enter it by night after having assumed a most diminutive form:

C, V, 2, 31 and 2^c (B, V, 9, 31^b and 2^c):

anena rūpeṇa mayā na cākyā rākshasām puri | praveśhṭum
rākshasair guptā krūrair balasamanvitaiḥ || 31 || 32 || lakṣ-
yālakṣhyeṇa rūpeṇa rātrau Lankā puri mayā | prāptakālam
praveśhṭum me kṛityam sādhyaitum mahat || 33 ||

R. C. M., V, 3, 24-25:

pura-rakhavāre dekhi babu kapi
mana kinha bicāra | ati-laghu rūpa
dharaūm nisi nagara karaūm pai-
sāra ||

The form assumed by Hanumat according to Tulasi Dāsa is that of a gnat (*maṇḍuka*), and thus is afforded another argument in favor of those who take Vālmiki's *ṛishadamaṇḍuka* in the parallel passage of the *R. (C, V, 2, 47)* to mean "gnat," differing thereby from Rāmavarman who takes it to mean "cat" (*māṇḍara*).

(65) When Hanumat tells Sītā he is Rāma's messenger, Sītā wonders how such a union between men and monkeys could ever take place:

C, V, 35, 2^b (B, V, 32, 2^b):

vānarāṇām naraṇāṇām ca katham āst samāgamah || 2 || .

R. C. M., V, 13, 11^a:

nara bānarahi sāṅga kahā kaise | . .

(66) To punish Hanumat, who, on account of his being a messenger, cannot be killed, Rāvaṇa gives order to set fire to his tail, a member monkeys are most proud of:

C, V, 53, 3^a (B, V, 49, 3^a):

kapiṇām kila lāṅgūlam iśhṭam bhavati bhūṣhaṇam | . .

R. C. M., V, 24, 10^a:

kapi kai mamatā pūmchhi para . . .

(67) The citizens of Lankā, terrified by the conflagration roused by Hanumat, cry out and call to each other:

C, V, 54, 40 (B wanting):

hā tāta hā putraka kānta mitra hā jivitechāṅga hatam su-
puṇyam | rakshobhir evam bahudhā bruvadbhiḥ chabdah
kṛite ghorataṛaḥ subhītaḥ || 40 ||

R. C. M., V, 26, 3^a:

tāta mātū hā suniya pakūrā |

and say "this is no monkey, but some god in monkey disguise":

C, V, 54, 35-36 (B wanting):

vajri Mahendras tridaṣṇavarō vā sākshād Yamo vā Varuṇo
'nilo vā | Raudro 'gnir Arko Dhanadaḥ cha Somo na vāna-
ro'yaṁ svayam eva Kālāḥ || 35 || kim Brahmanāḥ sarva-
pitāmahasya lokasya dhātūḥ chaturāṇanasya | iḥā 'gato
vānararūpadhāri rakshopasaṃhāraḥ prakopaḥ || 36 ||
kim Vaisṇavaṃ vā . . . *ddi*.

R. C. M., V, 26, 4:

hama jo kahā yaha kapi nahin hoi |
bānara-rūpa¹⁷ dhare sura hoi ||

¹⁷ Note how the *bānara-rūpa dhare* perfectly corresponds to the *vānararūpadhāri*.

After having set Laṅkā on fire, Hanumat throws himself into the sea to extinguish his flaming tail :

C. V, 54, 49 (B wanting):

Laṅkāṃ samastāṃ sampīḍya lāṅgūlāgniṃ mahākapiḥ |
nirvāpayāmāsa tadā samudre haripuṅgavaḥ || 49 ||

R. C. M., V, 26, 8-9 :

ulaṭi palati Laṅkā saba jāri | kūḍi
parā puni sindhu māṃjhāri ||
pūmchi bujhāi . . .

All the above particulars are wanting in *B*, where we miss the verses *C. V, 54, 31-50*.

(68) Sītā sends word to Rāma that away from him she may live another month, but no longer:

C. V, 38, 64-65^a (B, V, 36, 69):

idam brūyāc cha me nātham cūram Rāmam punaḥ punaḥ |
jīvitam dhārayishyāmi māmam Daśarathātmanja || 64 || ūrd-
hvaṃ māsān na jīveyam satyena'ham bravīmi te | . .

R. C. M., V, 27, 6 :

māsa divasa maham nātha na āvā |
tau puni mohi jiyata nahim pāvā ||

(69) Rāma clasps to his heart the jewel that Sītā has sent him through Hanumat, and bursting into tears asks the monkey what is Sītā's message to him:

C. V, 66, 1^d and 2. (B, V, 67, 1 and 2):

taṃ maṇiṃ hṛdaye kṛtvā ruroda sabalakṣmaṇaḥ || 1 || taṃ
tu dṛṣṭvā maṇireshbhaṃ Rāghavaḥ cōkakarcitah | netrābh-
yām acrupūṇābhyām Sugrīvam idam abravīt || 3 || . . . || kim
āha Sītā Vaidehī brūhi saumya-punaḥ punaḥ | . . . || 8 ||
. . . . || kimāha Sītā Hanuman || 14 || . . .

R. C. M., V, 31, 1^d-3:

Raghupati hṛdaya lāi soi Rūhi |
nātha jugala lochana bhari bārī | ba-
chana kahe kachhu Janaka-kum-
ārī || . .

(70) Rāma regrets he is not able to adequately recompense Hanumat for his great service :

B, V, 70, 11 and 12. (C, VI, 1, 12 and 13):

ekam tu mama dīnasya mano bhūyaḥ prakarṣati | yad asyā
'ham priyākhyāne na karomi sadṛik priyam || 11 || evaṃ sam-
chintya bahodhā Rāghavaḥ pritamānasah | nṛikahya sochiram
prityā Hanūmantam uvācha ha || 12 || 13 || ity uktvā bāshpa-
pūṇākṣho Rāghavaḥ . . .

R. C. M., V, 32, 6-8 :

pratiṇakāra karām kā torā | sana-
mukha boi na sakata mana morā ||
sunu euta tobi urina maiṃ nāhīm |
dekheum kari biehāra mana māhīm |
puni puni kapihi chitava suratrātā |
lochana nira pulaka ati gātā ||

The comparison with *C* is less persuasive, a fact which is quite exceptional; for, as we have seen, Tulasi Dāsa never follows two recensions at a time.

(71) Vibhīshana seeks refuge with Rāma. Sugrīva (and others, according to Vālmiki,) advises Rāma not to accept him, for he must certainly be a spy from Rāvaṇa. But Rāma replies that he cannot reject any one taking refuge with him, however guilty he might be :

C, VI, 18, 3 (B, V, 90, 33):

mitrabhāvena samprāptam na tyajeyam katharpehana | doṣo
yady api tasya syāt satām etad vigarhitam || 3 ||
he has made a vow to protect all suppliants :

R. C. M., V, 44, 1 :

koṭi bipra-badha lāgahi jāhū | āye-
sarana tajaum nahim tāhū ||

C, VI, 18, 33 (B, V, 91, 14):

sakṛid era prapaṇnāya tarā'smī'ti cha yāchste | abhayaṃ
sarvabhūtebhyo dadāmy etad vṛtaṃ mama || 33 ||
and on the other hand, even supposing that the *vālmiki* Vibhīshana had been sent by Rāvaṇa with hostile intentions, why should Rāma fear him ?

R. C. M., V, 43, 8:

mama pana-saraṇāgata-bhaya-hārī ||

C, VI, 18, 22-23 (B, V, 91, 29):

sa duṣṭo vā'py aduṣṭo vā kim esha rajanīcharaḥ | sūkṣmam
apy abhayaṃ kartu ṃ mama caktah katharpehana || 22 ||
piṇḍhān dānavān yakṣhān prithivyāṃ ehaiva rākṣasān |
angulya-graṇa tūn hanyām ichchhan harigaṇeṣvara || 23 ||

R. C. M., V, 44, 6-7 :

bheda lea pathavā Dasasā |
tabahum na kaohhu bhaya hāni
kapiśā || jaga mahum sakṣā nisā-
chara jete | Lachhimanu hanai
nimisa mahum tete |

Here Tulasi Dāsa substitutes Lakshmana for Rāma in the last part of the passage, but the meaning is the same.

(72) The Ocean apologizes for its delay in obeying Rāma, by laying all the fault upon the inertia of the five elements

C. VI, 22, 23 (B, V, 94, 5):

prithivī vāyur ākāṣam āpo jyotiṣ cha Rāghava | svabhāve
saumya tiṣṭhanti cācavatam mārgam ācṛitāḥ || 23 ||

R. C. M., V, 59, 2:

gagana samīra anala jala dharaṇī |
inḥa kai nātha sahaja jada karaṇī ||

Yuddhakāṇḍa.

(in the R. C. M.: Laṅkā'kāṇḍa.)

(73) In the R. C. M. (VI, 9, 8-9) Prahasta admonishes Rāvaṇa not to listen to his counsellors, who, to please him, give him pernicious advice, and quotes a saying, which is found in a quite analogous passage of the R., where Vibhishana gives Rāvaṇa the same admonition

C. VI, VI, 21 (B, V, 88, 16):

śulabhāḥ puruṣā rājan satatam priyavādinaḥ | apriy-
asya cha pathasya vaktā crotā cha durlabhaḥ || 21 ||

R. C. M., VI, 9, 8-9:

priya-bāl je sunahim je kahahim |
aise nara nikāya jaga ahahim ||
bachana parama-hita sunata ka-
thore | sunahim je kahahim te nara
prabhu thore |

(74) At the moment of narrating how the monkeys's host crossed over on the bridge, Tulasi Dāsa says that Rāma mounted a height and thence gazed upon the vast sheet of water, whereupon all the living beings of the sea came to the surface to behold the Lord (R. C. M., VI, 4). Shortly afterwards Tulasi Dāsa relates that Rāma pitched his tent on the opposite shore of the Ocean and told the monkeys they could go and feed on fruits and roots (R. C. M., VI, 5). Both particulars fail in the R. and look as if they had been entirely invented by Tulasi Dāsa. If we examine attentively the parallel passage in the R., however, we shall find there two particulars, which might well be presumed to have given Tulasi Dāsa the idea of his invention:

C, VI, 22, 7th (B, V, 95, 43):

dadṛiṣṭvā sarvabhūtāni sāgare setubandhanam |

C, VI, 22, 83 (B wanting):

vānarāṣṭrāṇ hi sā tīrṇā vāhinī Nalasetunā |

tīre nivivīṣe rūjñā bahumūlaphalodake || 83 ||

I see no difficulty in considering that Tulasi Dāsa derived the first of the two above innovations from Vālmiki's statement that all the marine beings beheld the building of the bridge, and the second from the epithet of *bahumūlaphalodake* given by Vālmiki to the opposite shore of the Ocean.

(75) Tulasi Dāsa (VI, 11-13) relates that Rāma ascends the Savela, where looking towards the east he sees the moon, and asks those who are around him their opinion concerning its spots. Then, turning to the south, he has the illusion of seeing a mass of clouds with flashes of lightning and thunder; but Vibhishana explains to him that there is nothing of the kind: what he takes for clouds is the royal umbrella of Rāvaṇa, who is sitting on the top of the palace; what he takes for flashes of lightning are the flashes of Mandodari's earrings; and what he takes for thunder is the sound of the drums. Rāma fits an arrow to his bow and strikes down Rāvaṇa's umbrella and crowns along with Mandodari's earrings. Any reader, however well acquainted with the R., will hold that there is nothing like this in it. In a passage of the *Yuddhakāṇḍa*, however, I have succeeded in discovering the source of this

innovation by Tulasi Dāsa.¹³ It is the *sarga* C, VI, 40 (falling in (A), B), where Vālmiki inserts an episode which, though appearing at first sight to greatly differ from that of Tulasi Dāsa, yet has a very close analogy with the latter. Rāma ascends the Savela with his retinue (C, VI, 40, 1) and thence turns his eyes to the ten cardinal points (40, 2) and sees Lakṣmī, above which Rāvaṇa is sitting on the top of the *gopura* (40, 3).

The first epithets with which Vālmiki describes Rāvaṇa here are: *śretachāmaraparyanta* and *vijayachchhatragobhita* (40, 4), next come also the epithets: *nilajīmūtasamkāṣa* *hemasamchhāditāmbara* (40, 5), and lastly the simile:

sarpdhyātapena samchhannam megharāḥim ivā 'mbare || 6 ||

In my judgment there can be no doubt as to Tulasi Dāsa's having derived from the above description by Vālmiki the first part of his innovation, viz., Rāma's illusion of actually taking Rāvaṇa and his umbrella for a mass of clouds.

Then Vālmiki goes on saying that Sugriva, as soon as he saw Rāvaṇa, leaped upon him and tore the crown from his head and dashed it to the ground:

ity uktvā sahaso 'tpatya pupluve tasya cho 'pari |
ākṛishya mukutap chitram pātayāmāsa tad bhuvī || 11 ||

And this is certainly the source of the second part of Tulasi Dāsa's innovation, viz., of Rāma's striking down with an arrow Rāvaṇa's umbrella and crown (along with Mandodari's earrings). Tulasi Dāsa, who always strives to exalt Rāma as much as possible, has deemed it convenient to ascribe to him even this feat, which in the *R.* is performed by Sugriva, and in consequence has been forced to change the particular of the leap and wrestle (convenient for the monkey, but not for Rāma) into that of the arrow.

As for the ascension of the Savela mountain and the consequent view of the rising moon, I think both of them are derived from *sarga* C, VI, 38 (B, VI, 14), where Vālmiki, too, describes the ascension of the mountain and the fall of the night illuminated by the full moon (C, VI, 38, 13; B, VI, 14, 24).

(76) Mandodari tries to persuade Rāvaṇa to give up fighting against Rāma:—it cannot be an ordinary man that slew Virādha, Khara, Triçiras and Kabandha and killed Yālin with a single arrow:

B, VI, 33, 23^b and 2. (C wanting):
Kharas cha nihataḥ samkhye tadā Rāmo na mānushaḥ
|| 26 || Triçiraḥ cha Kabandhaḥ cha Virādho Daḍḍake
hataḥ | çareṇai 'kena Bālī ca tadā Rāmo na mānu-
shaḥ || 27 ||.

R. C. M., VI, 36, 14-15:
badhi Birādha Khara Dūkhanahim-
lilā hateu Kabandha | Bālī eka
sara māren tehi jānahu Dasakan-
dha ||.

(77) Rāma laments over Lakshmaṇa, whom he thinks to be dead, whilst he has simply fainted, and says:—other wives, other sons, other kinsmen can be easily procured, but another uterine brother cannot be found in the world:

B, VI, 24, 7^b 5^c (C wanting):
yatra kvachid bhaved bhāryā patro 'nye 'pi cha bāndhavāḥ
|| 7 || tam tu deçam na paçyāmi yatra sodaryam
āpnuym |

R. C. M., VI, 61, 7-8:
suta bita nāri bhavana parivārā |
hohim jāhim jaga bārahim bārā |...|
milai na jagata sahodara¹⁴ bhrātā ||

¹³ Even if Tulasi Dāsa should have derived it from some of his secondary sources, rather than from the *R.* directly, the passage in the *R.* in question must be looked upon as the ultimate source.

¹⁴ Mark the correspondence: *sodaryam*=*sahodara*.

Then Rāma asks himself:—what answer shall I give Sumitrā, when she asks me about Lakshmana on my return to Ayodhyā?

B. VI, 24, 12^b (*C.* VI, 49, 8^d):

Sumitrāṃ kin na vakshyāmi putradarṣanālāsaṃ || 12 || .

R. C. M., VI, 61, 16c:

utaru kāha daihaūm tehi jāi | .

(78) In Kumbhakarṇa's episode Tulasi Dāsa follows Vālmiki very closely. Leaving aside the parallel of the particulars of the narrative, I limit myself to quoting only two parallel similes, which for us are much more significant, inasmuch as Tulasi Dāsa generally disdains to avail himself of the same similes as have been used by Vālmiki.

Tulasi Dāsa compares Kumbhakarṇa, when roused, to a personification of Kāla:

R. C. M., VI, 62, 7:

jāgā nisichara dekhīya kaisā | mānahuṃ Kāla deha dhari baisā |

The same comparison we find in the *R.*, where it is said that the gods stood amazed before Kumbhakarṇa, taking him to be Kāla himself:

B. VI, 38, 11 (*C.* VI, 42, 11):

çûlapācinam āyāntam Kumbhakarṇam mahābalaṃ |

hantum na çekus tridaçāḥ Kālo 'yam iti mohitāḥ || 11 ||

The situation is somewhat different, but the image is the same. The second simile, common to Vālmiki and Tulasi Dāsa, is the comparing of the bleeding Kumbhakarṇa to a mountain overflowing with streams:

B. VI, 46, 75 (*C.* VI, 67, 89):

karṇanāsārihīnas tu Kumbhakarṇo mahābalaḥ | rarāja
çopitotsakair girīḥ prasravaṇair iva || 75 ||

R. C. M., VI, 69, 7:

sonita aravata soha tana kāre |
janu kajjala-giri geru-panāre ||

B. VI, 46, 108^b-109^a (*C.* VI, 67, 121):

sa bāṇair atividhāṅgaḥ kṣatajena samukṣhitāḥ || 108 ||
radhiram parisarāva girīḥ prasravaṇair iva . . .

(79) The spear, with which Rāvaṇa throws down Lakshmana, striking him full in the breast, is described by Vālmiki as:

çaktiḥ samaprachandā Svayambhūdatā (*B.* VI, 36, 83; *C.* VI, 59, 105)

which epitheta Tulasi Dāsa maintains unaltered:

Brahma-datta prachandā sakti (*R. C. M.*, VI, 83, 9).

(80) In the *R.* Hanumat falls upon Rāvaṇa, who is trying to carry away the unconscious Lakshmana, and strikes him with his fist, as if with a thunderbolt. Tulasi Dāsa maintains the particular of the fist and amplifies the simile of the thunderbolt:

B. VI, 36, 91 (*C.* VI, 59, 112):

Lakshmanaṃ tu tataḥ çrīmān jighrikshantaṃ sa Mārutiḥ |
ājaghāno'rasi vyūḍhe vajrakalpena mushtinā || 91 ||

R. C. M., VI, 84, 2:

muṭhikā eka tāhi kapi mārā
pareu saila janu bajra-prahārā ||

(81) The gods are anxious on Rāma's account, seeing him on foot whilst Rāvaṇa is driving his chariot, and Indra despatches to him his own chariot guided by Mātali:

B. VI, 86, 67 (*C.* VI, 102, 5 and 2):

bhūmas athitasya Rāmasya rathasthasya ca rakshasaḥ |
na samaṃ yuddham ity āhur devagandharvadānavāḥ ||
6 || devatānāṃ vachasḥ çrutvā Çatakratur anantaram |
preshayāmāsa Rāmāya ratham Mātaliśāratham || 7 || .

R. C. M., VI, 89, 1-2:

devanba prabhuḥim payāde dekhā |
upaḥā nra ati-ebhobha bisekhā |
surapati nija-ratha turata paḥāvē |
harasha-sabitā Mātali lei āvē ||

(82) After alaying Rāvaṇa, Rāma thanks the monkeys and bears, and says it is only through their help that he has succeeded in defeating his enemy; the renown they have acquired in the enterprise will last for ever in the world:

B, VI, 92, 74^b-76 (*C* wanting):

uvāche'daṃ tadā sarvān Rāghave madhuraṃ vacaḥ || 74 ||
bhavatāṃ bāhuviryēṇa vikrameṇa balena cha | bato rākeha-
sarljo' yaṃ Rāvaṇo lokarāvaṇaḥ || 75 || atyadbhutam idaṃ
karma bhavatāṃ kirttivardhanam | kathayishyanti purnahā
yāvad bhūmir dharishyati || 76 ||.

R. C. M., VI, 106, 9-10:

kiye sukhi kahi bānī sudhā-sama
bala tumbāre ripu hayo | pāyo
Bibhishana rājo tibum pura jasa
tumbāro nita nayo ||

(83) The description of Sītā's return from Laukā and of the eagerness of the monkeys and bears to see the beauty, that had been the cause of so great a war, is completely identical in the *R.* and in the *R. C. M.* (*B*, VI, 99; *C*, VI, 114; *R. C. M.*, VI, 108). Tulasī Dāsa's close dependence on Vālmiki in this part of the poem is manifest not only from the faithful reproduction of every particular in the narrative, but also occasionally from the reproduction of the very words or epithets that have been used by Vālmiki in the corresponding passages. I pick out the most striking coincidences between Vālmiki and Tulasī Dāsa in this part of the poem.

Vibhishana orders *rākshasi* ladies to attend Sītā to the bath and to adorn her with rich ornaments. Then makes her mount a beautiful palanquin:

B, VI, 99, 12 and 11. (*C*, VI, 114, 14 and 13):

tataḥ Sītāṃ ciraśenātāṃ yvatibhir alaṃkṛitāṃ | mahārha-
bharapetāṃ mahārhambaradhāriṇīṃ || 12 || āropya
civikāṃ divyāṃ ...

R. C. M., VI, 108, 7-8:

bahu prakāra bhūshana pahirāye |
sibikā ruchira sōji puni lāye | tā
para harashi chadhī Baidehi | ...

In the *R. C. M.* Sītā proceeds, escorted by guards armed with canes:

beta-pāni racchhaka, (*R. C. M.*, VI, 108, 9)

who are none else but the guards:

vetrajharjharapāṇayaḥ (*B*, VI, 99, 23^a; *C*, VI, 114, 21^a)

of the parallel place in the *R.*

The monkeys and bears flock to see Sītā, but the above-mentioned guards push them back (*B*, VI, 99, 14-15 and 22-23; *R. C. M.*, VI, 108, 10). Rāma disapproves of such treatment towards his dear helpmates and orders Vibhishana to bring Sītā on foot, so that the monkeys may look at her, as at their mother:

B, VI, 99, 32^b and 31. (*C* wanting):

paṇyantu mātaraṃ tasmād ime kantūbalānvitāḥ || 32 ||
... || viśpijya civikāṃ tasmāt padbhyāṃ eva samānaya |
samlpṣṇ mama Vaidehīṃ paṇyantv enāṃ vanaukasāḥ
|| 31 ||

R. C. M., VI, 108, 11-12:

kaha Raghubīra kahā mama
mānahu | Sītahīm sakhi payāde
ānahu | dekhahīm kapi janani ki
nālm | ...

(84) When Sītā asks Lakshmana to prepare the pyre for her, Lakshmana hesitates and looks at Rāma; then, interpreting Rāma's wish from the expression of his face, complies:

B, VI, 101, 22-24 (*C*, VI, 116, 20 and 19):

evam uktaḥ tu Māithilyā Lakshmanaḥ paravīrabhā | vimar-
shavaṇam āpanno Rāmānanam udaikshata || 22 || sa vij-
hāya mataḥ tat tu Rāmasyā'kārasūchitam | cōhitāṃ chakāre
Saumittir mate Rāmasya vīryavān || 23 || na hi Rāmam
tadā kaṇchit krodhaḥokavaṇam gatam | anunetum ethe
vaktum drashtum vā'py aṭha cakruvan || 24 ||.

R. C. M., VI, 109, 3 and 11.

sunī Lachhimana Sītā kai bānī | ... |
lochana sajala jorī kara dōḍ | prabhū
sans kacū kahi sakata na oḍ ||
dekhi Rāma - rukha Lachhimana
dhāye | pāvaka pragaṭī kāṣha bahu
lāye |

THE ADITYAS.

BY R. SHAMASASTRY, B.A., M.B.A.S., BANGALORE.

(Continued from Vol. XLI. p. 296.)

From what has been said above, it is clear that the three good twin sons brought forth by Aditi in consequence of her eating the remnant must necessarily be the three pairs of intercalary months occurring in the course of three luni-solar cycles of five years each in consequence of the difference, or remnant as it is called, of twelve days between a lunar and a sidereal year. There is a sufficient clue in the passage itself to interpret the story of Aditi in this way. We are told in the passage that the sacrificer should omit or intercalate a year, and that then he should set up the sacred fire anew. From the *Maitrāyaṇya Samhitā* I. 10, 7, we also know that the rite of setting up or churning the fire anew was performed at the end of the third intercalary period of four months at the close of thirty years. We are told in the above passage that the sacrificer had to omit twelve days every year and that the embryos developed in the course of the (intercalated) year were born.* In the parlance of the Vedic poets, embryos or children are, as already pointed out, days of the year, either ordinary or intercalary. If, then, the twelve days at the end of the sidereal year are, as implied in the above passage, the embryo, which, when developed and born, the sacrificer is called to set up, it follows that the remnant which gave to Aditi a pair of sons is the same period of twelve days, giving rise to two intercalary months in the course of five luni-solar years. If this meaning is true, it follows that the three other pairs of Aditi's sons must also be three other pairs of intercalary months, occurring in the course of fifteen luni-solar years. If this is true, it is clear that what are called Dhātā, Aryamā, Mitra, Varuṇa, Amśa, and Bhaga, are the gods of the six intercalary months occurring in the course of fifteen luni-solar years. The only riddle that remains to be solved in the above passage is that connected with the birth of the fourth pair of sons, of whom one, called Indra, is said to have been fully born while the other, called Mātāṇḍa, is said to have been half-born. If we paraphrase the Vedic language in our modern language, and say that three pairs of intercalary months and a seventh one were full and the eighth intercalary month was a broken month, we know where to seek for an explanation of this break. We know that the only year which can keep the seasons, especially the commencement of the much-desired rainy season, in their usual position, is the solar year of $365\frac{1}{4}$ days, but not the sidereal year of 366 days, which is evidently too long by three-fourths of a day. This excess will amount to $\frac{3}{4} \times 20 = 15$ days in the course of four cycles of five years each or in twenty sidereal years. Accordingly if this greater cycle of twenty years, with eight or rather seven and a half intercalary months to be intercalated at the end of the twenty years, had begun to be observed, as the Vedic poets seem to have done, then the beginning of the year would fall back, not by eight months, as the Vedic poets first supposed, but by seven and a half months; or in other words the Hindu lunar year which begins with Chaitra¹⁰ would then fall back and begin at the middle of Śrāvaṇa of the rainy season, instead of at the end of Āshāḍha, as the poets seem to have expected it. How the poets found out the error, is a question with which we are not concerned here. It may, however, be suggested that the existence side by side of a different school of priestly astronomers who observed the solar year of $365\frac{1}{4}$ days¹¹ may have led them to detect the break in the eighth intercalary month. Whatever may be the way in which they detected the break or error, the only explanation that can possibly be given for the half-birth of the eighth intercalary month or son, seems to be the one I have given above. This theory of intercalary months explains the

¹⁰ But it is only in the latter calendar that we have a Chaitrādi year. In the Vedic period the year and the cycle began with Māgha.—J. F. F.

¹¹ See *Ande*, Vol. XLI, p. 272.

simultaneous arrival of the 'seven streams' of the rainy season, of the demon, Vṛttra, and of Indra, the god of the seventh intercalary month, for the destruction of the demon of the intercalary months.

The Vedic poets seem to have entertained two kinds of conceptions about the intercalary months; one evil and another good. Indra, Mārtanda, and other sons of Aditi seem to have represented the good side of the months, while Vṛttra, Sambara, and other demons are regarded as the personification of the evil nature of the intercalary months. If there still remains any doubt about this point, the following passage of the *Maitrāyaṇya Saṁhitā* (II. 4, 3, 4) will probably help to remove it:—

ततो यस्तोनोऽत्यरिच्यत तमग्ना उपप्रावर्तयत् । स्वाहेन्द्रशत्रुर्वधस्व इतीदंस्याहेन शत्रुनाचिकीर्षद्विद्रमस्य शत्रुमकरोत् । तथा वाक्स्वयमेव व्येस्त यं सोमं प्रावर्तयद्यस्मिन्मासाग्ना उपप्रावर्तयन्ता अग्नीवोमौ देवते प्राणापाना अभिसमन्ताम् । स वाक्पूर्वबाहूः पराविध्यन्तावति व्यरमत । यदि वा प्रवणं तावदासीद्यदि वाग्नेरधि तावदासीत्स वा इधुमावमेवा हा तिर्यङ्मुनर्धतेधुमावमेवान्वहुयो आहरहोरात्रे एवेधुमाव तिर्यङ्मुनर्धतेधुमावमन्वद्विष्यथो आहरधेमासमथो मासमथी संवत्सरमिति । स वा इमाः सर्वाः सोम्याः पर्यययत्तस्माद्वा इन्द्रोऽग्निनेत्तस्मात् स्वष्टिग्निनेत्तस्वेन्द्रः प्रतिनेच्छत्तमस्म प्रायच्छत् । तस्मै स्वष्टा वज्रमसिञ्चत्तपो वै स वज्र आसीत्तमुच्यं नाद्यक्रोदय वै तर्हि विष्णुरन्या देवतासीत्सोऽब्रवीद्विष्णा एहि इदमाहरिष्यावो येनायमिदमिति । स वैधात्मानं विन्वधन्मानिपर्याप्तार्थाग्निनेत्तस्मां तृतीयमेतदिति तृतीयं विवि तृतीयं । स यदस्यां तृतीयमासीत्तेन वज्रमुदयच्छद्विष्णुमुडितः । स वज्रमुच्यते वृद्धाग्निनेत्सोऽब्रवीदस्ति वा इदं त्यस्मिन्तर्तीयं तत्ते प्रसास्यानि मा मा वधीरिति । तदा अस्मै प्रायच्छत् । तस्यैवगृह्णात् । अथा ना इति तद्विष्णवेऽतिप्रायच्छत् । तद्विष्णुः प्रत्यगृह्णात् । अस्मास्त्विन्द्र इद्विषं वधास्वस्मान्वायो मपवानः सचंताम् । अस्माकं संत्वाशिषः । इति सोऽब्रवीत्स वा वास्मिन्तर्तीयमिति । स यदस्ति तृतीयमासीत्तेन वज्रमुदयच्छद्विष्णुमुडितः । स वज्रमुच्यते वृद्धाग्निनेत्सोऽब्रवीदस्ति वा इदं त्यस्मिन्तर्तीयं तत्ते प्रसास्यानि मा मा वधीरिति । तदा अस्मै प्रायच्छत् प्रत्यगृह्णात् । विमोधाः इति तद्विष्णवेऽतिप्रायच्छत् । तद्विष्णुः प्रत्यगृह्णात् । अस्मास्त्विन्द्र इद्विषं वधास्वस्मान्वायो मपवानः सचंताम् । अस्माकं संत्वाशिषः । इति सोऽब्रवीत्स वा वास्मिन्तर्तीयमिति । स यद्विषं तृतीयमासीत्तेन वज्रमुदयच्छद्विष्णुमुडितः । स वज्रमुच्यते वृद्धाग्निनेत्सोऽब्रवीदस्ति वा इदं त्यस्मिन्तर्तीयं तत्ते प्रसास्यानि मा मा वधीः । संधां नु संधावहे यथा त्वामेव प्रविशानीति । सोऽब्रवीद्यन्मां प्रविशेः किं मे ततः स्यादिति । सोऽब्रवीत्त्वामेवधीय तव भोगाय त्वां प्रविशेयमिति । तदा अस्मै प्रायच्छत् । तस्यैवगृह्णात् । विमोधाः इति तदाव वैधातव्या सहस्रं वा अस्मै तस्यायच्छत् । ऋचः सामानि यजुषि यद्वा इदं किंच तत्तैधातव्या तदाश्रोति पशुनेव ।

M. S. II, 4, 3.

उदरे वै वृजः पाप्मा भुङ्क्षानृच्यः पुरुषस्य । यत्तप उपैति पाप्मानं वा एतत्सृणुते आतृच्यं भुधमेव तस्मिन्वा अवहेतां सवनस्या अभ्यूध्यां वागवहत् । उमा जिह्वधुर्न पराजयेये न पराजिग्ये कतरद्वय नैनोः ।

M. S. II, 4, 4.

"Then what Sôma there remained, he poured it into the fire, and said rather in favour of Indra than Agni: 'Grow with Indra as thy enemy.' He wanted Agni to be Indra's enemy; but he made Indra the enemy of Agni: for his expression itself came out (*with that meaning*). Both the Sôma he pressed and the Sôma he put into the fire became the two deities Agni and Sôma, and also the two vital airs, Prâṇa and Apâna (*air inhaled and air exhaled*). No sooner did this dual god with his arm raised up attempt to strike Indra, then he himself fell down. Whether when the dual deity fell down, or when he was inside the fire (*it cannot be said*),—he, however, began to grow breadthwise by the measure of an arrow in the course of a day, and also lengthwise by the measure of an arrow in the course of a day. They say that day and night themselves grew breadthwise by the measure of an arrow and also lengthwise by the measure of an arrow. They say that then the half-months (*grew*); then the month; and then the year. Then this dual deity lay covering all these streams. Indra became afraid of him; Tvashtri also feared him. Indra requested the help of Tvashtri. The latter promised help: he sprinkled the thunderbolt (*with water*) for him. Tapas [the month so called] is, verily, the thunderbolt. Indra could not raise it. Then there was another god, Vishnu, near. Indra said: 'Come, Vishnu, let us catch hold of this by which this (*is done*).' Vishnu stretched his body in three directions, one-third portion on the earth, one-third in the air, and one-third in the heaven, so that Indra might get rid of his fear from the universal growth of the dual deity. Followed by Vishnu, Indra raised the thunderbolt against the one-third part of the dual deity lying on this earth. Seeing the thunder-

bolt raised, he became afraid of it, and said : ' There is in me some power and I shall give it to you. Do not kill me ! ' He gave it to Indra, and the latter took it, and gave it to Vishṇu saying ' keep it for me. ' Vishṇu took it and thought : ' May Indra put vital force into us ; may Indra bring prosperity to us ; may there be blessings upon us ; for there is internal power in him. ' Followed by Vishṇu, Indra raised the thunderbolt against the one-third part that lay in the air. Seeing the raised thunderbolt, he became afraid of it, and said : ' There is some power in me and I shall give it to you. Do not kill me ! ' He gave it to Indra, and Indra took it and gave it to Vishṇu, saying ' keep this for me a second time. ' Vishṇu took it, thinking : ' May Indra put vital force into us ; may Indra bring prosperity to us ; may there be blessings upon us ; for there is internal power in him. ' Followed by Vishṇu, Indra raised the thunderbolt against the one-third part that lay in the sky. Seeing the raised thunderbolt, he became afraid of it, and said : ' There is some power in me and I shall give it to you. Do not kill me ; let us make peace : I shall enter into you. ' Indra said : ' If you enter into me, of what use will it be to me ? ' He said : ' I shall brighten yourself ; I shall enter into you for your own enjoyment. ' (*So saying*) he gave it to Indra, and Indra took it and gave it to Vishṇu, saying : ' Keep this for me for a third time. ' It (the power) is, verily, a thousand of what are called Tridhātus (three elements). He gave it to Vishṇu. The Rīks, the Sāmas, the Yajus, and whatever else there is, all that belongs to the three elements. Hence he obtains cattle alone."

" Vṛitra is the belly ; and sin is hunger, the enemy of man. When man obtains Tapas, he rends the sin, the inimical hunger. This is what the heavenly utterance said : ' Both of them conquered, but never sustained defeat ; and no one defeated either of them (*Indra and Vishṇu*). "

We are told in the above passage that Vṛitra grew out of the remnant of Sōma and that he grew first in the form of a day, then of half a month, then of a month, and at last of a year. Thus Vṛitra is clearly identified with Time. Special attention should be paid to those sentences of the passage which clearly declare : ' Vṛitra began to grow breadthwise by the measure of an arrow in the course of a day and also lengthwise by the measure of an arrow in the course of a day. They say that day and night themselves grew by the measure of an arrow, and became half-months, months, and a year. ' It is clear therefore that Vṛitra is a demon infesting the intercalary months, or rather of the eighth intercalary month, since Indra who destroys him periodically is, as we have seen above, the god of the seventh intercalary month of the luni-solar cycle of five years. Since Vṛitra is made to ' enter into Indra himself, ' it is clear that he is the broken eighth month coming after the seventh month.

I have pointed out in my *Vedic Calendar* how the Vedic poets regarded the intercalary days as being sinful and inimical to man. In the above passage Vṛitra is spoken of as a kind of sin and enemy to man. We have already seen how Agni and Sōma are considered as the gods of the light half of an intercalary month. In the following passage of the Taittirīya Saṁhitā (II. 5, 2) Agni and Sōma are clearly described as the life-principles of Vṛitra. It follows therefore that Vṛitra must be the light half of an intercalary month. Since Vṛitra is periodically destroyed by Indra, the god of the seventh intercalary month, and since he is made one with Indra himself, it is also clear that Vṛitra is the first half of the broken eighth intercalary month. The reference to cold and fever in the passage seems to indicate the arrival of the rainy season. The passage itself runs as follows :—

स्वदा हतपुत्रो वीरं सोममाहरत्. तस्मिन्निदं उपहवन्मैक्षत. तं नोपाह्वयत् पुत्रं मेऽवधीरिति. स यत्तवेदासं कृत्वा प्रासहा सोममपिबत्. गन्धं यदस्यधिष्यत् तत् स्वदाहवनीयमुपमार्दयत्स्वाहंश्चपुर्वर्षस्वेति. यद्वर्तयत् तद्वृच-
स्व वृचत्वं. यद्वज्रवीत् स्वाहिंश्चपुर्वर्षस्वेति तस्मादस्य ईदः शमुन्मवत्. स संनवज्रमीषोनावनिसमभवत्. स इष्टुमिवभिष्टु-
मानं विष्टुमिवभूषत्. स इमाहोक्तानावृणोत्. तद्वृचस्य वृचत्वं. तस्मादिन्द्रोऽबिनेत्. स प्रजापतिमुपाधावत् शमुर्वे-
ऽब्रवीति. तस्मै वज्रं सिक्त्वा प्रायश्चक्षतेन जहीति. तेनाभ्यायत्. तावद्वृत्ताममीषोमी मा महापुष्यमंतः स्व इति. यत्

वे पुत्रं स्य इत्यब्रवीत् नामभवेत्तमिति. तौ भागधेयमेच्येताम्. साभानेतमग्नीमीयमेकादशकपालं पूर्णमासे प्रावच्यत्. तावदुतामभिसंवष्टौ वै स्वो न शक्नुव पतुमिति. स इन्द्र आत्मनः शीतकरावजनयत्. तच्छीतकरोर्जन्म. य एवं शीतकरोर्जन्म वेद नैनं शीतकरो हतः. ताभ्यामेतमभ्यनयत्. तस्माज्जम्बुमानादग्नीधो नैरिक्तमस्ताम्. प्राणापानौ वा एनं तवज्जाहिताम्. प्राणो वै दक्षोऽपानः क्रतुः. तस्माज्जम्बुमानो ब्रूयान्मायि दक्षकतु इति. प्राणापानावेवात्मन्धत्ते. सर्वनाशुरोति. स देवता वृषाजिह्वं चार्चयत् हविः पूर्णमासे निरवपत्. क्षति वा एनं पूर्णमास आ अमावास्यायां प्याययति तस्माद्वाचैर्जनी पूर्णमासेऽनुच्येते वृषन्वती अमावास्यायाम्. तत् संस्थाप्य चार्चयत् हविर्वेजनाशाय पुनरभ्यायत् तेऽभूतां द्यावापृथिवी माप्रहारावयोर्वै भित इति. तेऽभूतां वरं वृषावहेनक्षत्रविहिताहमसान्तिव्यसावब्रवीद्विचविहिताहमिति. इयं तस्माज्जम्बुविहितायो विचविहितेयं य एवं द्यावापृथिव्योर्वरं वेदेनं वरो गच्छति. स आभ्या. मेव प्रसूत इन्द्रो वृषमहन्. ते देवा वृषं हत्वाग्नीधोमावधुवन् इयं नो बहतमिति. तावदुतामपतेजसौ वै स्वो वृषे वै व्ययोस्तेज इति. तेऽधुवन् क इहनाभ्येतानि. गौरिस्वहृदम् गौराव सर्वस्य भिवमिति. साप्रवीत् वरं वृषे मध्येव सतोमयेन भुवजाभ्या इति तद्गौराहरत्. तस्माद्वि सतोमयेन भुञ्जते एतद्वा अग्नेस्तेजो यद्वेदेमत्त सोमस्य यस्पयः य एवमग्नीधोमयोस्तेजो वेद तेजस्त्वेव भवति. प्रज्ञवाविनो वसन्ति किन्दैवस्यं पौर्णमासमिति. प्राजापत्यमिति ब्रूयात्. तेनेदं अयेष्टं पुत्रं निरवासययति. तस्माज्जम्बु पुत्रं धनेन निरवसाययति. T. S. II. 5, 2.

"Tvashtri whose son was killed (by Indra) began to perform a Sôma sacrifice without inviting Indra to it. But Indra wanted to be invited to it. But he did not invite Indra, because the latter killed his son. But Indra drank the Sôma by force after obstructing the sacrifice. Tvashtri poured (*prâcartayat*) into the fire what Sôma here remained, and said (*addressing the fire*): 'Grow with Indra as thy enemy.' Vṛitra [the demon that rose from the fire in consequence of the above libation] is so called, because the act of pouring down Sôma into the fire is from the root *Vrit*. Since he said: 'Grow with Indra as thy enemy', Indra became his enemy. While coming out of the fire, he (Vṛitra) became Agni and Sôma. By the measure of an arrow, he grew on all sides and pervaded these three worlds. Because he pervaded them, he is called Vṛitra, 'pervader.' Indra became afraid of him, and going to Prajâpati, said: 'there has arisen an enemy to me.' Having sprinkled the thunderbolt with water, he gave it to him to kill the demon, Indra advanced with the thunderbolt. Then Agni and Sôma said: 'Do not kill; we are within (*him*). Indra said: 'You are for me; and so, come to me.' They asked for a share (*in the sacrifice*). Indra promised to them a cake on eleven pot-sherds, to be offered to them every full-moon. They said: 'We are bitten (*by his teeth*), and cannot come out (*of his mouth*). Then Indra created out of his own body cold and fever. This is how cold and fever came into existence. Whoever knows this origin of cold and fever, will not be attacked by cold and fever. Indra transferred cold and fever to them (*or to Vṛitra*). When he (Vṛitra) began to shiver, Agni and Sôma came out; it is *prâna* (air inhaled) and *apâna* (air exhaled) that left him. Prâna is *Daksha* and Apâna is *Kratu*. Hence the sacrificer should begin to shiver and say: 'Daksha and Kratu are within me.' Thereby he will have Prâna and Apâna in himself, and live the whole length of life. Having released the gods from Vṛitra, Indra offered an oblation at the full-moon on account of his slaying Vṛitra; for they kill him at full-moon, and revive him at new-moon. Hence a Rik-verse about the slaying of Vṛitra is recited at full-moon, while another about his revival is sung on the occasion of new-moon. Having offered an oblation for slaying Vṛitra, Indra again faced Vṛitra with his thunderbolt. Then the Sky and the Earth said: 'Do not kill him, for he is lying upon us.' And they said again: 'We request a gift (*if he is to be killed*); I shall like to be decked with stars—so said the Sky; and I shall like to be variously formed,—so said the Earth.' Hence the Sky is decked with stars, while the Earth is variously formed. Whoever knows this gift of the Sky and the Earth will have the same gift. Having been born out of these two (the Sky and the Earth), Indra killed Vṛitra. Having killed Vṛitra, the gods asked Agni and Sôma to carry their oblations. They said: 'We have lost our energy; for it is in Vṛitra.' The gods inquired among themselves, saying 'who can secure that energy?' Some replied: 'The cow (*can do that*); for the cow is the friend of all.' The cow said: 'I shall

request a gift : you live upon the two things that exist only in me.' The cow secured that energy. Hence they live upon the two things that exist in the cow alone. What is called *ghṛ* is the energy of Agni, and what is called milk is that of Sôma. Whoever knows thus the energy of Agni and Sôma will be energetic. The Brahmarâdîna debate: 'of what deity is the full-moon?' One should reply: 'Prajâpati.' Hence Prajâpati gave to Indra, his eldest son, a firm footing. Hence men give to their eldest son a firm footing by bestowing upon him a large portion of wealth."

The following passage of the Taittirîya Sâmhita (VI, 5, 1) seems to furnish additional evidence about Vritra being a half month:—

इन्द्रो वृषाय वज्रमुदयच्छत्. स वृषो वज्रादुद्यतावबिन्देत्. सोऽप्रवीन्मा मे प्रहारस्ति वा इदं मयि वीर्यं तस्मै प्रहास्यामीति. तस्मा उक्थ्यमेव प्रायच्छत्. तस्मै द्वितीयमुदयच्छत्. सोऽप्रवीन्मा मे प्रहारस्ति वा इदं मयि वीर्यं तस्मै प्रहास्यामीति. तस्मा उक्थ्यमेव प्रायच्छत्. तस्मै तृतीयमुदयच्छत्. तद्विष्णुः स्त्वतिष्ठत जहीति. सोऽप्रवीन्मा मे प्रहारस्ति वा इदं मयि वीर्यं तस्मै प्रहास्यामीति. तस्मा उक्थ्यमेव प्रायच्छत् तं निर्वायं भूतमहत् यज्ञो हि तस्य मायाऽऽसीत्.

T. S. VI, 5, 1.

"Indra raised the thunderbolt against Vritra. Then Vritra became afraid of this raised thunderbolt; he said: 'Do not kill me; there is some power in me; that I shall give you.' So saying he gave Ukthya (Fifteen) to Indra. Indra raised weapon against him for a second time. He said: 'Do not kill me; there is some power in me; that I shall give you.' So saying he gave the latter the same Ukthya (Fifteen). Then Indra raised the weapon against him for a third time; then Vishnu followed Indra, saying 'kill him.' He said: 'Do not kill me; there is some power in me; I shall give you that.' So saying he gave the same Ukthya to Indra. Indra then killed this guileless demon. It was, verily, the sacrifice which was his guile."

We are told in the above passage that while breathing out, Vritra gave *Ukthya* to Indra. *Ukthya* is a word used in the Vedic literature in the sense of 'fifteen.'¹² The word *Vajra*, the weapon of Indra, is also used in the same sense.¹³ Accordingly the wielding of *Vajra* or 'fifteen' by Indra, as well as the gift of fifteen by Vritra to Indra, clearly means the growth of fifteen days over and above the seventh intercalary month.

Contemporary religious records also furnish evidence that the *Ādityas* are the gods of intercalary months. It is known that the *Ādityas* are the sons of *Aditi*. *Aditi* in the *Rigveda* (X. 100 I, 94) is requested to protect the poets from *Amhas*, 'sin.' She and her sons also are requested to release the poets from guilt or sin (R. V. I. 24; II. 27; VII. 93; I. 162; VII. 87).¹⁴ I have shown in my *Vedic Calendar* how the word *Amhaspatya* is used in the sense of an intercalary month and an intercalary month alone. There is no doubt that this word is philologically identical with the Zend word *Ameshaspenta*. The number of *Ameshaspentas* is also seven. Prof. Macdonell says (*Vedic Mythology*, P. 44). "It is here to be noted that the two groups have not a single name in common, even *Mithra* not being an *Ameshaspenta*; that the belief in the *Ādityas* being seven in number is not distinctly characteristic and old; and that though the identity of the *Ādityas* and *Ameshaspentas* has been generally accepted since Roth's essay, it is rejected by some distinguished Avestan scholars."

Whatever might be the reason of the Avestan scholars for rejecting the identity, this much is clear, that the words *Amhaspatya* and *Ameshaspenta* are identical; and that when the former word is invariably used in the sense of an intercalary month in the *Yajurveda*, there is no doubt that the forgotten meaning of the latter word must also be the same; and that when the *Ameshaspentas* are seven, the number of *Amhaspatyas* must also be and is, as we have already seen, seven. As regards the difference in the names of the *Ameshaspentas* and of the *Ādityas*, it does not appear to be of much importance, for the seven *Amhaspatyas* or intercalary months are found variously named both in the *Rigveda* and the *Atharvaveda*.

¹² See *Tai. Sam.* VII. 2, 5, 17.

¹³ See *Ibid.* VII. 3, 8, 15; 4, 7, 25.

¹⁴ See Macdonell's *Vedic Mythology*, p. 121.

The following are some of the passages of the Atharvaveda (VIII. 9) in which the seven Ādityas or the gods of intercalary months are called in various ways :

पडाहृदसीताम्बडु मास उष्णातृतुं नो ब्रूत सप्तमोऽतिरिक्तः ।
 सप्त सुपर्णाः कवयो निषेदुः सप्त भंशंस्वदु सप्त शीशाः ॥ 17
 सप्त होनाः सनिवो ह सप्त मधूनि सप्त कृतवो ह सप्त ।
 सप्ताड्यानि परिभूतनायेताः सप्त गृध्रा इति शुश्रुषा वयम् ॥ 18
 अष्ट जाता भूता प्रपमज कृतस्थादिद्र कृत्विजो देव्या दे ।
 अष्टवोनिरवितिरहृषुवाष्टमी सविमनि हृष्वनेति ॥ 21
 अष्टद्वस्य पद्ममस्य कपीणां सप्त सप्तधा ।
 अपो मनुष्यानोपधीस्तां न पंचानु लेचिरे ॥ 23

"Six they call the cold, and six the hot months.

Tell ye us the season, which one is in excess; seven eagles, poets, sat down; seven metres after seven consecrations." 17

"Seven are the offerings, the fuels seven, the sweet things seven, the seasons seven; seven sacrificial butters went about the existing thing; they are such as have seven heavenly birds, so have we heard." 18.

"Eight are born the beings first born of Rīta; eight, O Indra!, are the priests who are of the gods; Aditi has eight wombs, eight sons; the oblation goes unto the eighth night." 21.

"Among the seers, eight are with Indra, and six are in pairs; they are seven-fold and seven; waters, men, and herbs,—over these the five (*years*) have showered." 23.

In verse 17 the poet clearly mentions the intercalary months (*Atirikta Ritu*) and numbers them in various names as seven. The expression 'seven seasons,' when taken with the expression 'the excessive season,' leaves no doubt that they are intercalary months and seven in number. In verses 21 and 23 the poet refers to the story of Aditi, and seems to hesitate to count her sons as eight, though that was the number fixed at first. In the following passages of the Atharvaveda (IX, 9. and R. V. I. 164) the seven months are called seven horses and seven sisters :—

सप्त जुञ्जति रथमेकचक्रमेको अद्वो वहति सप्तनामा ।
 विनानि चक्रमज्जरमनर्वं यत्नेना विद्वा भुवनधि तस्युः ॥ 2
 इमं रथमधि वे सप्त तस्युः सप्तचक्रं सप्त वरंस्वददाः ।
 सप्त स्वसारो भनि संनयेत यत्र गवां निहिता सप्त नामा ॥ 3
 द्वावधारं न हि तज्जराय वर्तते चक्रं परिधामृतस्व ।
 आ पुत्रा अग्ने विद्युनासो भव सप्त घतानि विद्यतिथ तस्युः ॥ 13
 सनेनि चक्रमज्जरं वि वाङ्मृत उत्तानायां दद्य जुक्ता वहति ।
 सूर्यस्व चतु रजसेत्यावृतं यस्मिन्नातस्युर्भुवनानि विद्वा ॥ 14.
 सार्कजानां सप्तप्रमाहरकजं पविष्यता कवयो देवजा इति ।
 तेषानिष्टानि विहितानि धामसाः स्यावे रेजंते विकृतानि रूपशः ॥ 16

"Seven harness a one-wheeled chariot; one horse, having seven names, draws it. Of three naves is the wheel, unwasting, unassailed, whereon stand all those existences. 2

"The seven that stand on this chariot, seven horses draw it, seven wheeled; seven sisters shout at it together; where are set down the seven names of the kine?"

"The twelve-spoked wheel,—for that is not to be worn out,—revolves greatly about the sky or Rīta, there, O Agni!, stood the sons, paired, seven hundred and twenty." 13.

"The unwasting wheel, with rim, rolls about; ten paired ones draw upon the upper side (*uttāna*); the sun's eye goes surrounded with the welkin in which stood all existences." 14

"Of those born together the seventh they call the sole-born (single-born); six, they say, are twins, god born seers; the sacrifices of them, distributed according to their respective stations and modified in form, move to the one permanent (*sthatre*)." 16.

(To be continued.)

EPIGRAPHIC NOTES AND QUESTIONS.

BY D. B. BHANDARKAR, M.A.; POONA.

(Continued from Vol. XLI., p. 173.)

XIV.—The Fourth Rock edict of Asoka.

THERE is one passage in this edict which has very much exercised students of Asoka's inscriptions. It is this, according to the several recensions:

Girnār:—*Ta aja devānaṃ priyasa Priyadasino rāṇo dhāmmacharaṇena bherighosho aho dhammaghosso vimānadasaṇḍa cha hastidasaṇḍa cha agikhaṇḍhāni cha añḍāni cha divyāni rūpāni dasayitpā añḍāni.*

Kālsī:—*Se aja devānaṃ piyasa Piyaḍasine lājine dhāmmachalanenā bherighosho aho dhammaghosso vimānadasaṇḍa hathini agikhaṇḍhāni añḍāni chā divyāni rūpāni dasayitu janasa.*

Dhauī:—*Se aja devānaṃ piyasa Piyaḍasine lājine dhāmmachalanena bherighosasaṃ aho dhammaghosasaṃ vimānadasaṇasaṃ hathini agikhaṇḍhāni añḍāni cha diviyāni rūpāni dasayitu munisaṇasaṃ.*

Shāhbāzgarhī:—*So aja devānaṃ priyasa Priyādrasita rāṇo dharmacharaṇena bherighosha aho dharmaghosha vimānasaṃ drajanasaṃ hastinaṃ jotikhaṇḍhāni añḍāni cha divāni rūpāni draḍayitu janasa.*

Mansehrā:—*Se aja desanaṃ priyasa Priyādrasine rane dharmacharaṇena bherighoshe aho dharmagoshe vimānadrasanaṃ hastinaṃ agikhaṇḍhāni añḍāni cha divāni rūpāni draḍeti janasa.*

This passage has been variously interpreted, but these interpretations may be divided into two classes according as they are taken to refer to terrestrial objects or atmospheric phenomena. The first kind of interpretation has been favoured by M. Senart and Prof. Bühler and the second by Professors Kern and Hultsch. I confess, the first interpretation commends itself to me as being more natural. But the actual sense I deduce from the passage differs from that of M. Senart or of Prof. Bühler, and I give it here for the kind consideration of the scholars, who are interested in the matter.

In the first place, it is highly important to understand the syntax of the passage. The word *aho* I take with Professors Kern and Hultsch as equivalent to *abhasat*. *Vimānadasaṇḍa* of the Girnār and Kālsī texts corresponds to *vimānadasaṇasaṃ* of the Dhauī and *vimānasaṃ drajanasaṃ* of the Shāhbāzgarhī recension, and must, therefore, be supposed to stand for the Sanskrit *vimānadarāṇāni*. The same remark applies to *hastidasaṇḍa* of the Girnār text.

This may then be literally put into Sanskrit thus:

Tad-adya devānāṃ-priyasya Priyadarśino rāṇo dharmacharaṇena bheri-ghosho-bhavad-dharmaghosho vimāna-darāṇāni cha hasti-darāṇāni cha agni-kaṇḍhāni-cha anyāni cha divyāni rūpāni darāyitāni janasaṃ.

And it may be translated into English as follows:

"But now in consequence of the practice of righteousness by king Priyadarśin, beloved of the gods, the sound of the drum has become the sound of righteousness, showing the people the spectacles (*darāṇa*), of the palaces of gods (*vimāna*), and of the (white) elephant, masses of fire, and other divine representations."

Now, what can be the meaning of this passage? In my opinion, what Asoka means is that with him the drum has become the proclaimer of righteousness. The sound of a drum invariably precedes either a battle, a public announcement, or the exhibition of a scene to the people. But since Asoka entered on his career of righteousness, it has ceased to be a summons to fight, but invites people to come and witness certain spectacles; and as those spectacles are of such a character as to generate and develop righteousness, the drum has thus become the proclaimer of righteousness. This appears to me to be the natural sense of the passage. And now the question arises: what scenes or spectacles did Asoka show to his subjects? Obviously they are the *vimāna*, *hastina*, *agnikaṇḍha* and so forth. These terms must, therefore, be so interpreted as to show that they could create and foster righteousness. But it must also be borne in mind that the sense we attach to them must not be different from that ordinarily assigned to them. So to begin with, what does Asoka mean by *vimāna*? According to M. Senart it denotes here "processions of reliquaries", and, according to Bühler, "cars of the gods." Bühler, I think, comes very near the proper sense though he misses the full significance of it. Now, Pāli scholars need not be told

that there is a work in the Pāli literature called *vimāna-vatthu*. It has been edited for the Pāli Text Society by Mr. E. R. Gooneratne. The introduction of this book opens with the following paragraphs:

"The *vimāna-vatthu* is a work that describes the splendour of the various celestial abodes belonging to the Dewas, who became their fortunate owners in accordance with the degree of merit they had each performed, and who there spent their time in supreme bliss.

"These *Vimānas* are graphically described in the little work as column-supported palaces that could be moved at the will of the owners. A Dewa could visit the earth, and we read of their so descending on occasions when they were summoned by Buddha.

"The lives of the Dewas in these *vimānas* or palaces were limited, and depended on the merits resulting from their good acts. From all that we read of them we can well infer that these habitations were the centres of supreme felicity. It is doubtless with much forethought that peculiar stress is laid, in our work, on the description of these *vimānas*, in order to induce listeners to lead good and unblemished lives, to be pure in their acts, and to be zealous in the performance of their religious duties.

"Stories from the *Vimāna-vatthu* are not unfrequently referred to in later doctrinal works, when a virtuous career in life is illustrated. Thus Maṭṭakundali and Sirimā Vimāna are referred to in the Dhammapada Atthakatha; Chitta, Guttita, and Rewati are quoted in the Sutta Sangaha."¹

Anybody who reads the above extract will be convinced that these must undoubtedly be the *vimānas* referred to by Aśoka. He seems to have made representations of them and paraded them in various places. His motive in doing so we can easily surmise. As *vimānas* are palaces of gods who became their owners in consequence of the pure unblemished lives they led on earth, it was natural that he should show their representations to the people in order to induce them to practise righteousness and become possessors of such celestial abodes. That this was the sole object of the work *Vimāna-vatthu* is clear from the words of Mr. Gooneratne quoted above in bold type. Aśoka is very fond of telling us that the performance of *dharma* produces merit (*puṇya*) which in its turn conduces to the attainment of heaven (*sarga*). It is, therefore, quite intelligible that he might have shown to his subjects the palaces of the denizens of heaven of which they became masters through the righteous deeds performed by them while on earth, in order to impress on their minds that they also by similar virtuous courses could become owners of them.

Now, what can *hasti-darśana* signify? *Hasti*, of course, ordinarily means an elephant. But representations of what elephant did Aśoka exhibit to his people? They again must be of such a kind that they could deserve the name *dīrya*. I am almost certain that by *hasti* here we are to understand none by the White Elephant, i.e., Buddha. We know the story of the conception of Buddha. Māyā had a dream in which she saw the Bodhi-attva in the shape of a white elephant approaching her and entering into her womb by her right side. We have sculptures of this scene not only at Bharahat but also at Sāñchi. Nay, we have incontestable proof that this story was known to Aśoka and that he had at least one representation made of him. On the Girnār rock below Rock Edict XIII and separated by an indentation we have the following line: . . . *va sveto hasti saṃsloka-sukhaharo nama* [The white elephant whose name is the bringer of happiness to the whole world]. Prof. Kern was the first to recognise in this an unmistakable reference to Buddha. At Kālsī too on the east end of the rock containing the edicts of Aśoka inscribed, we have the outline of an elephant with the letters *gajattama* engraved between his feet. These letters, I think, stand for *gajottamah*, and nobody can seriously doubt that here also we have another reference to Buddha. Most probably there was a similar outline or figure of an elephant in Girnār and also at other places. But it has now disappeared. I have, therefore, no doubt that similar representations of the White Elephant were made and exhibited to the people, most

¹ The idea of the *vimānas* is not foreign even to Jaina literature. "The servants of the Siddha are *Devatas*, or the spirits of good and great men; who, although not so perfect as to obtain an exemption from all future change, yet live in an inferior heaven, called *Sarga*; where for a certain length of time, they enjoy great power and happiness; according to the merit of the good works which they performed, when living as men." "The mortal bodies of mankind and *Devatas* perish, while the *Vimānas* (i.e., the abodes of deities of various classes) endure." (As. Res., Vol. IX, p. 252 and pp. 280-81). Prof. K. B. Pathak also informs me that in the Digambara Jaina works entitled *Māghanandi-śrāvaṇaśāstra* and *Gomāśāstra* have been given not only minute descriptions but also paintings of the *Vimānas*.

probably accompanied by oral descriptions as in the *ākhyānas* so as to show clearly to them how Buddha was *sarva-loka-sukha-dhara* and thus induce them to imitate his actions in their lives.

There now remains the third word, *vic.*, *agniskantha*, and I am afraid I cannot give any satisfactory explanation here. The word ordinarily signifies a mass of fire, but this mass of fire must be of such a kind that it can be shown to be connected with a well-known incident and point to a moral. The only story that occurs to me in this connection is that narrated in *Jātaka* No. 40 (Fausboll, Vol. I) called *Khadirāṅgāra-jātaka*¹. The Bodhisattva of the story was the Lord High Treasurer of Benares. As he was sitting to take his meal, a Paṇḍita Buddha rising from his seven days' trance in the Himālayas approached with his bowl and begged food. The Bodhisattva asked the bowl to be brought to him and filled it. But Māra wanted the Paṇḍita Buddha to die of starvation by preventing the food from approaching him. So in the mansion of the Bodhisattva he created a fire-pit as fearful as in a hell. His cook who was taking the filled bowl to the Paṇḍita Buddha saw this blazing fire and started back. The Bodhisattva came to know what had happened and went out in person to hand over the bowl to his guest. As he stood on the brink of the fiery pit, he noticed Māra, but heeded him not. And so he strode on with undaunted resolution to the surface of the pit of fire, and lo! there rose up to the surface a large and peerless lotus-flower, which received the feet of the Bodhisattva. The bowl was given to the guest, and standing in the lotus he preached the truth to the people, extolling alms-giving and the commandments.

Several of the *jātaka* stories we find sculptured in the Bharahat and Sāūchi *stūpas*. They thus appear to have become popular even so early as the third century B.C.; and there is no reason why one of them should not have been utilised by Aśoka to make visual representations for impressing the people. Besides, the story just summarised must have been thought by him as exactly fulfilling his purpose, because it lucidly illustrates the fruit of alms-giving, of which Aśoka is never weary of speaking in his edicts. If he really wanted to encourage alms-giving, I do not think he could have made a happier selection for making representations of it and showing them to his subjects. The *jātaka* again appears to have been considered to be a very important one by the Buddhists themselves. For the same tale is re-repeated under the name of *Śreṣṭhijātaka* in the *Jātakamālā* of Āryaśūra published by Prof. Kern.

The word *rūpa* occurs in two ancient inscriptions. Line 2 of the well-known Hāthi-gumphā inscription of Khāravela has the following:—*tato lekha-rūpa-nāma-vishitra-vidhi-vistradena*, where the word has been rendered by 'painting' by Pandit Bhagwanlal Indraji. A Pābbohā cave inscription again reads *Śrī-Krishṇa-gopī-rūpa-kartā*, where Prof. Bühler translates it by 'statue'. I confine myself to the generic sense of the word, and render it by simply 'representation'. To this day it is a custom especially in villages, where English education has not spread, to make either paintings or clay representations of mythological scenes and explain to the people in detail what they are intended for. I have no doubt that Aśoka must have done a similar thing. Nobody can, I am sure, object to such *rūpas* being called *dirga*, which means not only 'belonging to heavenly regions' but also 'pertaining to divine beings.'

XV.—Talegaon Grant of the Rashtrakuta king Krishna I.

My friend, Sirdar K. C. Mehroole, Secretary of the *Bhārat-itihāsa-samśhodhak-maṇḍal*, has kindly sent to me for decipherment a set of copper plates recently brought to light at Talegaon (Dhamdhare's) in the Poona district. It registers a grant issued by Krishna I. of the Rashtrakūṭa dynasty. Most of the verses descriptive of the genealogy are found in other Rashtrakūṭa records. And the three or four new verses that are for the first time met with in this grant teach us nothing new excepting that in one stanza we are told that his son was called Prabhu-tuṅga. This must evidently refer to his son Govindarāja, at whose request, as mentioned further in the inscription, the grant was made.

The charter was issued on the occasion of a solar eclipse which happened on the new moon day of Vaiśākha of Saka 690³ when Plavaṅga was the cyclic year. At that time Krishna I.'s

¹ My attention to this *Jātaka* was drawn by Prof. Dharmapand Kozambi.

² The solar eclipse in question occurred on Wednesday the 23rd March 768 A. D.

victorious camp against the Gaṅgas was, we are informed, stationed at Maṇṇanagara, obviously the same as Mānyapura where the royal residence of the Gaṅgas was fixed in the 8th century, and which has been identified with Maṇṇe, north of Nelamangal in Mysore. The grantees were the Brāhmaṇas living in the Karahāṭa Ten-thousand and one Bhaṭṭa-Vāsudeva, to whom two parts only were assigned. The village granted was Kumārigrāma, and we are told that this village was given at the request of two persons called Vāsishṭha-Srikumāra and Jaiṇanti-Phaṇṣiya. Along with Kumārigrāma four more villages seem to have been granted. They were Bhamaroparā, Araluva, Sindigrāma and Taḍavale. All these places are expressly stated to have been comprised in the Pūnaka district (*viśaya*). Their boundaries also have been specified. To their east were Khambhagrāma, Vorimagrāma and Dādimagrāma. To the south were the Khadiraveṇa hills. To the west were Alandiyagrāma and Thiragrāma and to the north the Mūla river. Almost all these localities can be identified on the survey of India Atlas Sheet No. 39. Thus of the villages granted Kumārigrāma is Karebgaon, Bhamaroparā Bowrapoor, Araluva Oorooloa, Sindigrāma Secdowneh, and Taḍavale Turudes. Of the villages situated on the east, Khambhagrāma is Khamgaon, Vorimagrāma Boree, and Dādimagrāma Dalemb. Khadiraveṇa, the name of the hills to the south, cannot be identified, though of course these hills are there as specified. Of the villages on the west Alandiyagrāma and Thiragrāma are doubtless the well-known Ālandī and Theur, the first better known as *chōrāchī* Ālandī and the second as the favourite resort of Mādhavrāo Peshwā who died there. The river Mūla obviously corresponds to the present name Muḷā of a river which joins the Muṭhā near Poona, their conjoint stream flowing afterwards eastwards and passing by the north of the villages mentioned. And it is this conjoint river that appears to have been known in those early days by the name Mūla, though it is now restricted to one of its feeders. But the most interesting fact recorded in this connection is the mention of Pūnaka as the name of the district wherein the villages were situated. Pūnaka obviously is Poona. That Poona is an ancient place has long since been known. It is well-known that the two Shaikh Salla *dargāhs* on the river bank were built about the close of the 13th century on the site of two old temples called Nārāyaṇēśvar and Puṇēśvar. Again, the caves near the Fergusson College are another indication of the antiquity of the city. But the most important and ancient monument is the rock-hewn temple of Pañchāleśvar situated in the Bhāmburḍā suburb, which has been assigned by archaeologists to the 7th century A.D. We have thus ample and sure proof that Poona was a very old place. But it was never dreamt that the name Poona also was equally ancient and that it was the head-quarters of a district in those early times as it now. This, however, is now quite clear from the fact that Pūnaka, which can stand for nothing else but Poona, is spoken of as the district which contained the villages granted.

MISCELLANEA.

KAKATIKA MONKS.

In J. R. A. S. for January, 1912, Professor H. Lüders, while commenting upon a Brāhmī inscription, in which the word *kakatikāṇaṃ* occurs, observes—

"It is more difficult to say who is meant by *kakatikāṇaṃ*. I take this to be a proper name, and "as a cooking place in a Vihāra can hardly be intended for anybody but the monks living there, *kakatika* would seem to be the name of those monks, though I cannot say why they were called so."

Taking the Professor's assumption that *kakatika* is the name of an order of monks to be correct, may I venture to offer an explanation? To me the word appears to be an *apabhraṃśa* from Sanskrit *kaukṭūṭika* formed by Pāṇini 4. 4. 46. Unfortunately, Patañjali does not comment on the *sūtra*, but the *sūtra* itself explains the formation of '*kaukṭūṭika* *paśyati* = *kaukṭūṭikah*' as '*saṃjñāyām*,' i.e., not in the literal sense of 'one who sees a hen', but as a name, or attributive class-name. The *Kāśikā* illustrates by '*kaukṭūṭika*

bhīkṣuh' and explains that by '*kaukṭūṭi*' here is meant, by a transferred epithet, the space over which a hen can fly at one flight. The *bhīkṣu* who limits his vision over so much of the ground before him as can be covered by one (proverbially short) flight of a hen is meant by the word. There must have been *bhīkṣus* who submitted themselves to this sort of discipline to subdue the sense of sight and to avoid the *himsa* of small insects. The Buddhists and Jains set a great store by *ahimsa*, and the sight of a Jaina *siddha*, brushing the ground before him with a silk broom and treading with his neck bent low at a snail's pace, is not rare even now in India. If we assume that some *bhīkṣus* were called *kaukṭūṭikas* after this habit of theirs, we can understand the latter contemptuous sense of 'hypocrite' attributed to this word by the metrical Sanskrit *koṣas*. It is with a certain diffidence that I offer this explanation, but the word '*Samjñāyām*' in Pāṇini's *sūtra* itself supports my conjecture, I think.

Ajmer.

CHANDRADHAR GULERI.

THE INDIAN INSCRIPTIONS AND THE ANTIQUITY OF INDIAN ARTIFICIAL POETRY.

BY G. BÜHLER.

[Translated by Prof. V. S. Ghate, M.A.; Poona.]

[The Editors of this *Journal* are deeply indebted to Prof. H. Lüders for having kindly taken the trouble of securing the permission of the Vienna University to publish a translation of Dr. Bühler's *Die Indischen Inschriften*, etc. This booklet is so important that a reliable translation was a long-felt desideratum to the Indian scholars. The Editors are therefore highly thankful also to Prof. V. S. Ghate for having prepared the translation which is being published in this *Journal*].

Indian Epigraphy which, since the last fifteen years has received a new impulse, and which thanks to the progress of Sanskrit philology as well as to the perfecting of the methods of multiplying the inscriptions, leads to more certain results than in early times, has already provided us with several important particulars elucidating the literary and religious history of that part of the world which is inhabited by the Brāhmanas and which wants a history as such. On the one hand, we owe to it particular and very important data, which definitely fix the time of prominent authors, as for instance, recently the time of the dramatic poet Rājasekhara, whose pupils and patrons, the kings Mahendrapāla and Mahipāla ruled during the last decade of the ninth century and in the beginning of the tenth century of our era, as shown by Mr. Fleet and Prof. Kielhorn. On the other hand, the comparison of the partly insignificant notices in the inscriptions with the accounts of literary tradition or with the (data) conditions of the present day, permits us to have an occasional peep, in the development of all the types of literature and of all the religious systems, a peep whose worth is considerably significant in the absence of really historical details. Such, for instance, is the observation that the tradition about the home of several Vedic Schools and also of the works belonging to them, is confirmed through the statements in the old land-grants, inasmuch as, these mention not only the names of the donees but their secular and spiritual families. Not less significant for the history of the very important though little regarded in early times, religion of Mahāvīra-Vardhamāna is the demonstration gradually rendered feasible, that, his followers, the Nirgranthas or Jainas, are mentioned in a number of inscriptions, which runs on from the beginning of the historical period of India, with but rare interruptions, and that the assertions in their canonical works, about the divisions of the Monk-Schools are made reliable to the most part, through writings of the first century of our era. These hitherto published results are, however, only a small part of what the inscriptions may possibly yield to us. An accurate working out and a fuller estimate of the hitherto published materials little in extent though they be, will show that one can procure rich instruction from them, in all the departments of Indian Research; and that their results furnish specially sound proof-stones for the theories about the development of Indian intellectual life, theories which the Indologists, build on very weak foundations, compelled as they are by sheer necessity. The following treatise is a small contribution towards the examination of inscriptions in this spirit. Its aim is to establish firmly those results which the inscriptions yield for the history of Indian Kāvya or the artificial poetry of the court, as also to demonstrate, how far the same agree with the new opinions regarding the development of this species of literature. My reason for undertaking to treat of this question before other perhaps more interesting and less disputed questions, is the recent publication of the Gupta inscriptions by Mr. J. F. Fleet in the third volume of the *Corpus inscriptionum Indicarum*. This exceedingly important work offers a larger number of wholly or partly metrical inscriptions with absolutely certain dates. The same, taken together with some documents already made known through reliable publications (editions) allow us to prove the existence of a Kāvya literature in Sanskrit and Prakrit during the first five centuries of our era, and to show that a great period of literature, which brought into general prominence, the style of the poetic school of Vidarbha or Berar, lies before the middle of the fourth century. They also make it very probable that the year 472 after Christ is to be fixed as the *terminus ad quem* for the poet Kālidāsa.

Such conclusions would, no doubt, appear quite unimportant and scarcely worth the trouble of a special inquiry to those searchers who busy themselves with the history and the literature of the European peoples. The Indologist, however is unfortunately not in that happy position to look down with contempt, even upon such general results. Because, the history proper of Indian Artificial Poetry begins not earlier than in the first half of the seventh century of our era, with the reign of the mighty king Harsha or Harshavardhana of Thānesar and Kanouj, who ruled over the whole of Northern India from 590-648 A.D. The works of his favourite court-poet Bāṇa-bhaṭṭa who tried to portray the life of his master and of himself in the incomplete historical novel *Śrī-Harshacharita*, and who besides wrote, as we know for certainty, the romance *Kaddamūri*, and the poem (song) *Chandī-lata*, and perhaps also the drama *Pārvatī-pariṇaya*, are the oldest products of the Court-poetry, whose composition, no doubt, falls within the narrow limits given above. Before this time, there exists no *Kāvya* as such whose age is hitherto determined with some accuracy and certainty or allows itself to be determined with the accessible documents. Only of one work which shows, throughout, the influence of the *Kāvya* style and which contains several sections entirely written in the *Kāvya* style, we mean, of Varāhamihira's metrical Manual of Astrology, the *Bṛhat-saṃhitā*, it can be said with confidence that it is written about the middle of the sixth century; because Varāhamihira begins the calculations in his *Pañchasiddhāntikā*, with the year 505 A.D.; and he is supposed to have died in the year 587 A.D. according to the statement of one of his commentators. As to when the most celebrated classical poets Kālidāsa, Subandhu, Bhāravi, Pravarasena, Guṇādhya and the collector of verses, Hāla-sāta-vāhana lived, we possess no historical evidence. We can only say that the wide spread of their renown is attested for the first half of the seventh century by the mention of their names by Bāṇa and in the Aihole-Meguti inscription of 634 A.D.; as also that some of them, like Guṇādhya to whose work Subandhu does allude repeatedly, must certainly have belonged to a considerably early period. Besides this, there are anecdotes only poorly attested, as well as sayings of very doubtful worth; and the scanty details contained in the poems themselves, which might serve as points (stepping stones) for determining their age, are very difficult to be estimated, because the political and literary history of India during the first five centuries of our era lies very much in obscurity. When the age of the most important poets is so absolutely uncertain, it is but natural that the case should be in no way better with the general question of the age of the *Kāvya* poetry. In the literature, we come across very meagre traces which point to the fact that the artificial poetry was cultivated from earlier times; and to our great regret, even the age of the most important work in which quotations from *Kāvyas* occur, we mean, the *Mahābhāshya*, is in no way, above doubt. Thus it is not improbable that these quotations might be left unheeded as being witnesses little to be trusted as some of the most important inquirers have already done, and that theories, not taking notice of the same, might be put forth, which shift the growth of the artificial poetry to a very late age. Under these circumstances it can be easily seen why I make myself bold to claim some interest for the evidence based upon the testimony of inscriptions, in favor of a relatively high antiquity of the artificial poetry.

The materials which the third volume of the *Corpus Inscriptionum Indicarum* offers for this inquiry, are not insignificant, and comprise not less than 18 numbers whose dates are certain or at least approximately determinable, the age of their composition lying about between 350 and 550 A.D. The assiduous labours of Mr. Fleet and Mr. Dikshit, about the astronomically calculable dates of the Gupta-inscriptions, irrefutably show that the beginning of the Gupta era falls 241 years later than that of the Śaka era, and for the reducing of the Gupta to the Christian era, they leave us just the option of adding 318 or 319 years. Mr. Fleet has tried to show that the year 319 or 320 A.D. marks the beginning of the Gupta era. Dr. Bhandarkar, on the other hand, advocates 318 or 319, and for important reasons. For a literary-historical inquiry, it is of course the same (it matters not, it is indifferent which of these suppositions is the right one). The first king who makes use of the Gupta era is Chandragupta II, named Vikramāditya, whose inscriptions and coins show the years 82-94 or 95, i.e., 400-413 or 401-414 A.D. From

the reign of his father Samudragupta, there are two inscriptions not dated. These belong to the last half of the fourth century and as regards Mr. Fleet's No. I, it can be asserted that it was composed when Samudragupta had already ruled for a large number of years. Because the number of his exploits eulogised therein is very considerable. Mr. Fleet's supposition that this inscription must have been composed after Samudragupta's death, rests, as it will be shown in detail below, on a wrong interpretation of the expression "Samudragupta's glory had gone up to heaven". As for the documents dated according to the Málava era, the detailed expositions of Dr. Peterson and Mr. Fleet leave no doubt that the era is identical with the Vikrama era of 56-7 A.D. The age of several undated numbers can be determined, as Mr. Fleet has shown, by the comparison of their contents with those of the dated numbers. If we arrange chronologically the numbers important for our inquiry, we may have the following list.—

1. No. I, Harisheṇa's panegyric of Samudragupta, composed sometime between 375-390 A.D., on the Allahābād pillar, consisting of 9 verses and the rest in high, elevated prose, at the close named a *Kāvya*.
2. No. II., A fragment of a poetic description of Samudragupta, composed sometime between 353—390 A. D.
3. No. IV., An undated fragment of a poetic description of four early Gupta-kings, from the reign of Chandragupta II ; Gupta-Saṃvat 82-94 or 95.
4. No. VI., The small, wholly metrical, undated inscription in Virasena's cave at Udayagiri, from the same period.
5. No. X., The inscription on Dhruvasārman's pillar at Bhilsaḍ, composed partly in high prose and partly in metre, dated Gupta-Saṃvat 96, *i. e.*, 414 or 415 A. D., in the reign of Kumāragupta, Gupta-Saṃvat 96—130, 414/5—448/9.
6. No. XVII., The long composition, from Mayūrákshaka's well in Gāṅgdhar, dated Saṃvat 480 (?), 428/4 (?) A. D., from the reign of king Viśvavarman.
7. No. LXI., The small metrical inscription from Saṅkara's cave in Udayagiri, dated Gupta-Saṃvat 106, 424 or 425 A. D.
8. No. XII., The undated, partly metrical inscription on the pillar at Bihār, from the reign of Skandagupta, Gupta-Saṃvat 136-149, *i. e.*, 454-467 or 455-468 A. D.
9. No. XIII., The undated inscription on the pillar at Bhitari, which is partly in high prose and partly in metre, from the same period.
10. No. XIV., The long, wholly metrical Rock-inscription at Junāgaḍh, which shows the Gupta year 136-138, 454-6 or 455-7, and is called a *grantha*.
11. No. XV., The wholly metrical inscription on Madra's pillar at Kahāṇ, dated Gupta-Saṃvat 141, 459 or 460 A. D.
12. No. XVIII., Vatsabhaṭṭi's wholly metrical *prastāvi* about the Sun temple at Mandasor, dated Málava-saṃvat 529, 473/4 A. D.
13. No. XIX., The wholly metrical inscription on Mātṛivishṇu's and Dhanyavishṇu's pillar at Eraṇ, dated Gupta-saṃvat 165, June 21, 484 A. D., in the reign of Budhagupta.
14. No. XX., The short, wholly metrical, inscription on Goparāja's tomb-stone at Eraṇ, dated Gupta-saṃvat 191, 509 or 510 A. D., in the reign of Bhānugupta.
15. No. XXXIII., Viśula's, undated, wholly metrical, panegyric of the king Yaśodharman, on the pillar at Mandasor, spoken of as *ślokaś*, and engraved by the same stone mason as the following dated inscription.
16. No. XXXIV., (?35) The wholly metrical *Prastāvi* on Dakṣa's well at Mandasor, composed in the Málava year 589, 533-4 A. D., in the reign of king Yaśodharman-Vishṇuvardhana.
17. No. XXXV., (?36) The inscription on Dhanyavishṇu's boar-statue at Eraṇ, in the year 1 of king Toramaṇa, composed partly in verse and partly in high prose.
18. No. XXXVI. (?37), The wholly metrical panegyric on Mātṛicheṭa's temple of Viṣṇu in Gwalior, from the year 15 of the reign of Mihirakula, who, according to No. XXXIII, verse 6, was a contemporary of Yaśodharman.

It would be perhaps possible to augment this list by the inclusion of some other documents, as for instance, the Meheranli pillar-inscription of emperor Chandra, No. XXXII, and the poetically coloured genealogy of the Maukharis on the Asirgadh seal, No. XLVII, which, according to the character of their writing, belong to this period. But those already mentioned quite suffice for our purpose. Their number shows that during the period from 350-550 A. D., the use of the *kāvya*-style in inscriptions, especially in the longer ones, was in vogue and from this very circumstance it follows that court-poetry was zealously cultivated in India. It will be seen further on that this conclusion is confirmed by other indications of no doubtful character. Our next and most important work is, however, to inquire how far the samples of the *Kāvya* style contained in the inscriptions agree with the works of the recognized masters of Indian poetic art, and how the same are related to the rules in the manuals of poetics. A full discussion of all the numbers mentioned would in the meanwhile be too detailed and of but little use. It would suffice to select a poem that falls in the beginning of the period and another that belongs to the close of the same, as representatives and to go through the same thoroughly. With the rest, only a few important points will be prominently touched upon. On similar grounds, I take up, for purpose of a detailed discussion, No. I—Harishega's panegyric of Samudragupta and No. XVIII.—Vatsabhatti's *prajasti* on the Sun temple at Daśapura-Mandasor; and immediately turn myself to the latter.

(To be continued.)

THE ADITYAS.

BY R. SHAMASASTRY, B.A., M.B.A.S., BANGALORE.

(Continued from p. 24)

The seven hundred and twenty sons, spoken of in verse 13, are evidently the 720 days and nights of the civil year; and the ten twins on the upper side of the chariot, referred to in the next verse, must necessarily be the 10 days and nights above the 360 days of the year. This shows that the poets were well acquainted with the real length of the solar year. It is the seven *Ādityas* or the gods of the intercalary months, that are referred to in verse 16. The expression that the seventh was single-born clearly shows the break in the eighth intercalary month, as pointed out above.

In the following verses of the *Atharvaveda* (X. 8) the mention of the number one thousand in connection with seven swans seems to furnish additional evidence that the seven *Ādityas*, eagles, or swans, as they are variously called, are the seven intercalary months.

द्वादश प्रथमद्वयमेकं त्रीणि नभ्यानि क उ सचिक्केत ।

तथाहतास्त्रीणि सप्तानि संकवच्यद्विद्वत् सीता भविष्यत्या ये ॥ 4

इदं सवितृर्दिजानीहि दध्यथा एक एकजः ।

तस्मिन्नापि स्यान्मर्धंते य एषामेक एकजः ॥ 5

एकचक्रं वर्तते एकनेमि सहस्राक्षरं प्रपुरो निषद्व ॥

अर्धेन विद्वं भुवनं जजान यदन्त्यार्धे क तदभू ॥ 7

सहस्राङ्गणा विद्यतावस्य पशो हरेर्हसस्व पतसस्वर्गम् ।

स देवान्सर्वानुरागुपद्व्य संपद्व्यन्याति भुवनानि विद्व ॥ 18

"Twelve felines, one wheel, three naves,—who understands that? Therein are inserted three hundred and sixty pins, pegs that are immovable."¹⁵ 4

"This, O Savitri!, do thou distinguish: six are twins, one is sole-born; they seek participation in him who of them is the sole sole-born." 5

"One-wheeled it rolls, one-rimmed, thousand-syllabled, forth in front, down behind; with a half it has generated all existence; what its other half is,—what has become of that?" 7

"By a thousand days are the wings expanded of him, of the yellow swan flying to heaven; he, putting all the gods in his breast, goes, viewing together all existences."¹⁶ 18

¹⁵ Comp. R.V.I. 164, 48.

¹⁶ Comp. A.V. XIII, 2, 38.

In verse 4, the Sāvana year of 360 days is described; and in verse 5, the three pairs of intercalary months together with the single seventh month are referred to. In verse 7, the cycle of 20 years is described as containing a thousand syllables, i.e., days. The question about the other half seems to refer to the loss of fifteen days in the eighth intercalary month. In verse 18, the last cycle of five years with $7\frac{1}{2}$ intercalary months seems to be described as a special period or great year, each wing or half of which is measured by a thousand days. The yellow Swan is the seventh intercalary month. Now, if we expand the wings by putting 1,000 on each, its duration becomes equal to 2,000 days. In 2,000 days there are $\frac{2,000}{29d, 12h, 45m.} = \frac{2,000 \times 32}{945} = \frac{12,800}{189} =$

67 lunations and 22 days, taking a lunation to be equal to 29 days, 12 hours, and 45 minutes.¹⁷ It is clear, therefore, that by the expressions 'thousand-syllabled chariot,' and 'a wing of thousand days' duration,' the poet refers to the last cycle in the greater cycle of 20 years, in as much as that cycle is approximately equal to five lunar years and seven and a half lunations. It is also to be noted that five lunar years are $= 5 \times 354 = 1,770$ days and twenty-times 12 extra days $= 20 \times 12 = 240$ days. Putting these together, we have $1,770 + 240 = 2,010$ days, which is greater by 10 days than the duration of 2,000 days, as described in verse 18. We shall see that the same cycle of five years with seven and a half intercalary months is also termed Purusha, 'man' or Sapta-purusha, 'seven men'. Hence it is probable that the rising up of the thousand-headed, thousand-eyed, and thousand-legged Purusha by 10 *angulas* or days above the earth, described in the Purushasūkta, refers to the same cycle of 2,010 days, which was made equal to 2,000 days. It is probable that the use of *angulas* to mark days was a common practice among the Vedic poets, as among the Arabians. Regarding the use of fingers by an Arabian prophet to mark days, this is what Albêrûnî says¹⁸:—

"—We are illiterate people, we do not write, nor do we reckon the month thus and thus and thus,' each time showing his ten fingers, meaning a complete month or thirty days. Then he (the prophet) repeated his words by saying 'And thus and thus and thus', and at the third time he held back one thumb, meaning an incomplete month or twenty-nine days."

In the following verses of the Atharvaveda (XII, 3, 16; and XIII, 2, 24) the same intercalary months are described as seven sacrifices and seven yellow steeds:—

सर्वधाम्नसवः पर्युद्धन् य एषा ज्योतिष्मान्त वक्षकपे ।
वयस्त्रिंशदेवतास्तान्संचते स यः स्वर्गं गमिष्ये लोकम् ॥
सप्त स्वा हरितो बहति रेव सूर्यं योषिष्केषां विचक्षन्म् ।
अमुक्त सप्त शुभ्रवः सूर्यो रथस्य सप्तयः सानिर्वाति स्वयुक्तिभिः ॥

"Seven sacrifices the cattle obtained; of which some were full of light, and others were pining; to them the three and thirty attach themselves; do thou conduct us unto the heavenly world."

"Seven yellow steeds, O heavenly sun, draw in the chariot thee, the flame-haired, the out-looking; the sun hath yoked the seven neat daughters to the chariot; with them who are self-yoked, be goeth."

The only point to be considered in this is the number 33. Here, again, the allusion seems to be to the same thousand days by which each wing of the heavenly swan was said to be expanded; for 1,000 is equal to $\frac{1,000}{30} = 33$ months and 10 days.

In the following verse of the Atharvaveda (X, 8, 7 and 13; and XII, 4, 22) the poets speak of the same cycle as one of eight wheels or eight intercalary months:—

अष्टाचक्रं वर्तते एकनेत्री सहस्राक्षं प्रयुरी निपदया ।
अर्धेन विदवं भुवनं अजान वदस्वार्थं कलमः स केतुः ॥

"The eight-wheeled (*chariot*) rolls, having one rim, thousand-syllabled, forth in front, down behind; with a half it has generated all existence; what its other half is,—which sign is that?"

¹⁷ But the Vedic estimate of the synodic lunar month, as shown by the Jyotish Yôjînga, was 1530 days divided by 63 lunations = 29 days, 12 hours, 23 2236 Seconds.

¹⁸ *Chronology of Ancient Nations*, P. 78; 1879.

In the following passage of the Atharvavêda (IX, 10, 17) the poet counts the intercalary months neither as eight nor as seven, but exactly as seven and a half and calls them embryos:—

सप्तार्धमभ्युदयस्व रेतः विष्णोस्तिष्ठति मदिषा विधुर्मनि ।

ते धीतिनिर्मेनसा ते विपदिषतः परिभुवः परिभवति विदवतः ॥

"Seven and a half, embryos, the seed of existence, stand in front in Vishnu's distribution; they, by thoughts, by mind, they, inspired, surround on all sides the surrounders."

In the following verses of the Atharvavêda (X, 3, 8-10), the poet mentions the thirteenth month, and refers to the seven intercalary months as seven eagles and seven suns, making Kaśyapa the head of them:—

अहोरात्रैर्दिनितं विचरंयं त्रयोदशं वासं यो निर्मिनीते ।

तस्य देवस्य कुक्षस्य एतदागः..... ॥

कृष्णं नियानं हरयस्सुपर्णा अपो वसाना विवसुत्पतन्ति ।

त आदवृचन्सदनादृतस्य तस्य देवस्य कुक्षस्य एतदागः ॥

यत्ने च कदम्ब रोचनायद्यस्तदितं पुष्कलं चित्रमातुः ।

यस्मिन्मूर्ध्ना अर्पितास्सप्त सार्कं तस्य देवस्य कुक्षस्य एतदागः ॥

"He who measures out the thirteenth month, fabricated of days and nights, having thirty members,—against that god, angered, is this offence.

"Black the descent, the yellow eagles, clothing themselves in waters, fly up to the sky; they have come hither from the seat of Rita; against that god, angered, is this offence.

"What of thee, O Kaśyapa, is bright, full of shining, what that is combined, splendid, of wondrous light, in which seven suns are set together; against that god, angered, is this offence."

In the following verses of the Atharvavêda (XIX, 53, 1 and 2) the Poet describes the same seven intercalary months as time in the form of a thousand-eyed horse with seven reins, and also as seven wheels:—

कालो भद्रो वहति सप्तगदिनः सहस्राक्षः भगरो धुरिरिताः ।

तमारोहन्ति कवसो विपदिषतः तस्य चक्रा भुवनानि विदधा ।

सप्त चक्रा वहति काल एष सप्तास्य नानीरुतं न्वक्षः ।

स इना विदधा भुवनान्यर्वाङ्मालः स ह्यीयेत प्रथमो नु देवः ।

"Time drives a horse with seven reins, thousand-eyed, possessing much seed; him the inspired poets mount; his wheels are all beings.

"Seven wheels doth this Time drive; seven are his naves, immortality forsooth his axle; he, Time, including all these beings, goes on as first god."

The meaning of a thousand eyes is the same as that of a thousand syllables, or a thousand days, expanding a wing of the heavenly swan, explained above.

In what is called the Aruṇôpanishad of the Taittiriya Âranyaka, the poet describes the same year with an intercalated month (*Adhisamvatsara*), beginning with the rainy season, together with the signs and characteristics by which its arrival was usually found out, so picturesquely and forcibly that one cannot resist the conclusion that the poet refers to the seven intercalary months. Since the Upanishad furnishes additional evidence about the theory I have been setting forth here, some of the passages of it, bearing on the subject, are quoted below, with translation and notes. Owing to the want of the intercalation of 8 or 7½ months, the beginning of the year falls back, and coincides, as pointed above, with the middle of the month of Śrâvṇa, when the rainy season sets in with lightening and rainbow. Accordingly the poet calls upon the waters to remove the heat and fever of the summer along with the demon infesting the intercalary months, and to manifest the arrival of the Âdityas, the gods of the seven intercalary months:—

आपनापानपस्तर्वा अस्मादस्मादितोऽमुतः ।

अग्निर्वायुश्च सूर्यश्च सह संवत्सरर्जिया ॥ 1

वायवश्च रश्मिपतयः नरीष्वात्मानो भद्रुः ।

देवीर्मुच्यन्तुपरीः पुचवत्सवाय ते सुत ॥ 2

महानाम्नीर्नहानामाः महसो महसस्वः ।

देवीः पर्यन्तसूचरीः पुत्रवत्स्वाय मे सुत ॥ 3
 अपादन्त्यग्निमया रक्तः अपादन्त्यग्निमया रघम् ।
 अपात्रामप जावति अपदेवीरितो हित ॥ 4
 वज्रं देवीरजीतांश्च भुवनं देवसूचरीः ।
 आदित्यान्किंति देवीं योनिनोर्ध्वसूचय ॥ 5
 शिवा नदशंतमा भवंतु दिव्या आप औषधयः ।
 सुसूचीका सरस्वति वा ते म्योन संवृष्टि ॥ 6

"I have obtained and obtained all waters from this and that side ; may Agni, the sun, and the wind make the waters prosperous. 1

"O waters, whose steeds are the (*seven*) winds, whose lords are the rays of the sun, whose body is formed of shining rays, who are not malicious to anyone, and who are the mothers of all beings, allow me to have sons. 2

"O Waters, who are of pleasing names, who are worthy of worship, who are of shining form, who are productive of food, and who are the mothers of the raining clouds, allow me to have sons. 3

"O Waters, take away the excessive heat and fever, take away the demon, take away the bad smell, and take away our poverty. 4

"O Waters, hold up the thunderbolt, hold up life and all beings ; O mothers of gods, hold up the Ādityas as well as the goddess Aditi together with her womb (*bringing forth the Ādityas or intercalary months*). 5

"May the heavenly waters and herbs be auspicious to us, and may they bring happiness to us ; O water, thou art the bestower of comforts ; I have not seen thy abode in the sky." 6

In the next passages the poet proceeds to define time and its characteristics :—

स्मृतिः प्रत्यक्षमेतिह्यनुमानदधनुष्टयम् ।
 एतेरादित्यवन्दलं सर्वैरेव विधास्यते ॥ 7
 सूर्यो मरीचिमावत्ते सर्वस्माद्भवनादधि ।
 तस्याः पाकविशेषेण स्मृतं कालविशेषणम् ॥ 8
 नदीव प्रभावात्काचिद्वक्ष्य्यास्त्वन्दते यथा ।
 तां नद्योऽभिसमायाति सोऽस्त्वती न निवर्तते ॥ 9
 एवं नानासमुत्थानाः कालास्त्ववस्तरं भिताः ।
 अनुष्टयं महशद्व सवै समवयति तम् ॥ 10
 स त्वस्त्वैस्त्वमाविष्टः उहस्त्वन्न निवर्तते ।
 अधिस्त्ववस्तरं विद्यात् तदेवलक्षणे ॥ 11
 अनुष्टयं महशद्व समाकृतः प्रवृद्धयते ।
 संवस्तरः प्रत्यक्षेण नाधिसत्त्वः प्रवृद्धयते ॥ 12

"Remembrance of past experience, seeing with the eyes, tales heard from others, and inference as the fourth,—with all these (*four kinds of evidence*), the circle of the (*seven or eight*) Ādityas is laid up. 7

"The Sun takes up the water from the whole world ; by means of the peculiar and ripe form of the waters [*i. e.*, raining clouds] the characteristics of the times are remembered.

"Just as a river flows from an imperishable source, and just as other streamlets join her, and just as she, growing in volume, never returns, so the moments of various birth are merged in the year, by small bits and big periods ; they all form the year ; the year being formed of them grows in length and never returns.

"One should understand this as a year with intercalation (*Adhishevatsara*), and that by means of the characteristics (*to be spoken of*) ; formed of small and big bits of time, the ordinary year is visible to the eye ; but not so the swollen thing [*i. e.*, the year in which intercalation is to be made]." 12

The poet has defined the year as being formed of a number of small and big moments ; and has pointed out the difficulty of seeing the intercalated year. Now he is going to describe those characteristics by which its arrival can be inferred :—

पटवे विक्रियः पियः एतद्गुण लक्षणम् ।
 यवैतदुपवृद्धयते सहस्रे तत्र नीयते ॥ 13

एकं हि शिरः नाना मुखे कृत्स्नं तद्गुलक्षणम् ।
 वनयतस्तर्पेन्द्रियाणि जल्पितं स्वेव विद्यते ॥ 14
 शुक्रकृष्णे संवत्सरस्य दक्षिणपामयोः पादर्वयोः ।
 तस्यैषा भवतिः—
 शुक्रं तेऽन्वह्यजतं तेऽन्यत् ।
 विपुलपे महती घोरिवाति ॥ 15
 विदवा हि माया भवति स्वभावः ।
 भद्रा ते पूषन्निह रातिरस्त्विति ॥ 16
 नाव भवना न पूषा न पशवः नादित्यः ।
 संवत्सर एव प्रत्यक्षेण प्रियतमं विद्यात् ॥ 17
 एतद्दे संवत्सरस्य प्रियतमं रूपं योऽस्य महानर्थं दत्तव्यमानी भवति ।
 इदं पुण्यं कुरुष्वेति तनाहरणं दद्यात् ॥ 18

"Being covered with (*clouds*), being damp and tending to wet, and being red (*with the rainbow*),—these are the characteristics of Varuṇa, the lord of water or the rainy season; when this is seen, there is put in a thousand (*days*);

"The head is uniform and single; but in its face it (*the year*) is varied; this is the sum total of the characteristics of the seasons (*intercalary*). From both sides (*udhayaśah*.) there are seven vital organs; talk alone paints it thus [in reality there is no such thing as the vital organ, &c.];

"White and dark days are on the right and left sides of the year: the following is said about it:—

O year, that which is white of thee [*i. e.*, the day, and that part of the year which extends from the winter solstice to the summer solstice] is quite different from what is to be worshipped of thee [*i. e.*, the night, and the part of the year which extends from summer solstice to winter solstice]; thy days are of different form; between them thou art like the sky. 15

"O year, thou art productive of food; thou possessest all kinds of enchantment; O Protector, may thy gift be good to us. 16

"No beings here; no god Pushan; no Cattle; no Āditya; there is the year alone; man looks upon it as a dear thing; the form of the year is what is dear to him; hence saying 'Do, thou, this meritorious thing,' one should give gifts when this great thing (*the intercalated year*) comes into existence."

As I have already pointed out, the poet speaks of the arrival of the rainy season, when, for the adjustment of 20 lunar years to twenty sidereal years, the last cycle of 5 years in the period of 20 years was divided into two parts, and each part was made equal to 1,000 days. The expression that there are seven vital organs in the face of the year which, as a whole, is uniform, refers to the insertion of the seven intercalary months. As it is necessary to know the two parts or sides of the year when 1000 days are counted to form each part, the poet has referred to those two sides as being formed of white and dark days respectively. There is no doubt that by the two white and dark sides, the poet refers to what is called the Uttarakṣaya (that part of the year which extends from the winter solstice to the summer solstice) and also the Dakṣiṇakṣaya (that part of the year which extends from the summer solstice, which coincides with the arrival of the rainy season, to the winter solstice¹⁹). It is well known that it was during Dakṣiṇakṣaya that sacrifices were performed. Hence the poet has called that part of the year as being worshipable. 'The meritorious thing' refers to the gifts made in the sacrifices made at the end of the Dakṣiṇakṣaya.

The poet now goes on to speak of the seven Ādityas and of the loss of the eighth Āditya:—

साकं जानां सप्तयनादरेकजं बहुयना रूपयो देवजा इति ।
 तेषामिदानीं विहितानि धामसाः स्वाये रजते विकृतानि रूपशः ॥ 19
 को नु पर्वा भविष्यति सखा सखायप्रवीत् ।
 अशको भस्मशीयते । यस्मिन्त्याज सखिषिर् सखायम् ।

¹⁹ Compare Bhagavadgītā, VIII, 24, 25.

न तस्य बाध्यवि भागोऽस्ति । यर्षी शुचोत्पलकं शुचोति
नहि प्रवेष्टुं सुकृतस्य पयानिति. ॥ 20

"Of those born together, the seventh they call the sole-born; six, they say, are twins, god-born seers; the sacrifices of them, distributed according to their respective abodes and modified in form, move to the *permanent*. 19

"O men, tell me who is that friend who, though not vexed, said about his friend thus:—'As a deserter, he wants to fly from us?' Whoever has deserted his friend that knew him will have no share (*of offerings*) even in talk; if he hears that there is such a thing, he hears what is untrue; for he does not know the path of good deeds." 20

The poet says here that while the six sons of Aditi are born in pairs, the seventh became single-born, since the eighth, as he says later on, was half-born and was therefore cast out. It is only for the seven that sacrificial offerings are distributed according to their abodes, but not for the eight, who, though a friend, has fled from the company of his friend, the seventh Āditya. This is what the poet seems to imply when he says that a deserting friend will have not even a promise of a share of sacrificial offerings.

The poet now goes on to speak of the five years' cycle:—

धनुः धनुना पुष्यमानः विननाशनिधायः ।
वदित्व त्रिंशका वल्गा शुक्लकुण्डो च पादिको ॥ 21

"One season, being propelled by another, runs and makes a noise: sixty are the groups of thirty (*days*): white and dark parts are also sixty in number." 21

Before going to speak of the deserter, the poet finds it necessary to describe the rotation of the seasons and of the five years cycle. Here the sixty groups of 30 days are evidently sixty months, i. e., five years. In this cycle a season of two months, propelled by other seasons, steps in. The sixty white and dark parts in the last line seem to refer to the greater cycle of sixty years, in which 120 solstices will happen. (60 winter, 60 summer.) It is to be remembered that the cycle of five years is closely connected with the cycle of sixty years, which is made of twelve cycles of five years each. There may probably be some reference to the names of the sixty years in the words 'Prabhava,'²⁰ and 'Akahaya,' used in the beginning of the Upanishad, while comparing the year to a river. After describing the characteristics of the spring and other seasons which are omitted here as unnecessary, the poet goes on to speak of the winter season when the sacrifices in connection with intercalation are completed:—

अतिताम्राणि वासांसि अदिवजससि च ।
विद्वेदेश विमहरति अग्निजिह्वा असद्वत ॥ 22
नेव देवो न मर्त्यः न राजा वरुणो विभुः ।
नाग्निवेष्ट्रो न पवमानः मातृरुक् यन विद्यते ॥
द्विष्यत्यैका धनुर्गर्भिः पृथिव्यावरात्रितः ।
सत्येन्द्रो वसिष्ठेन धनुश्चोमन्तिनस्त्वयम् ।
तद्विधुधनुरित्यहं भवत्येषु चसते ।
एतदेव शशोर्बोहस्त्वयस्य एतद्विधुधनुः ॥ 25
रुद्रस्येव धनुर्गर्भिः शिर वसिष्ठेन
स प्रवर्धोऽभवत् । सत्ययाः सप्रवर्धेन ॥
यज्ञेन यज्ञते रुद्रस्य स शिरः प्रतिवर्धति ।
नेन रुद्र आरुको भवति य एवं वेद ॥ 26

(To be continued.)

²⁰ Prabhava is the name of the first year and Akahaya of the last in the cycle of sixty years. What is the authority for saying that Akahaya instead of Kahaya, is the name of the last year of the cycle?—J. F. F. Akahaya is the name by which the last year is commonly known in the Southern parts of India; see *Essentials of Astronomy*, p. 155, Mysore G. T. A. Press, 1912.—B. S.

THE PEREGRINATIONS OF INDIAN BUDDHISTS IN BURMA AND IN THE SUNDA ISLANDS.

BY PROFESSOR DOCTOR E. MULLER-HESS OF BERN.

Translated from the German by

G. K. NARIMAN, RANGOON.

THE sources, which are at our command for the ancient history of Burma, are the *holy scriptures* of southern Buddhists composed in Pāli. These were written in India and touch on the history of further India and Burma only cursorily and as a digression. Besides they cannot claim implicit reliance; but implicit reliance cannot at all be placed in Oriental annalists since a simple straight narrative without ornamentation of their own imagining has been always foreign to them.

According to the concordant testimony of all the histories, the Burmans came from the Ganges Valley and their kings were relatives to the Princes of Kosāla and Kapilavastu. Of this tradition only this much is true, namely, that the Burmans emigrated no doubt, from the north and possibly in the course of their migration touched the valley of the Ganges. But there can be no possibility about their being related to the Aryans of India; that would be in conflict with their racial peculiarities as well as their language, which, no doubt, belongs to the monosyllabic group. The whole theory of the descent of the Burmans from India was first invented, after the conversion of the country to Buddhism, by court historians, who thereby flattered the reigning kings, inventing for them a kinship with the clan from which the Buddha had sprung.

In another instance the Burmese tradition comes in contact with the history of India, namely, as regards prince Daśaratha. He, too, was a descendant of the Sākya dynasty of Kapilavastu to which Gotama belonged, and wandered after renouncing the throne eastwards to Burma, where he founded the so called second Tagaung Dynasty.

From these repeated attempts of the historians to connect the history of Burma with that of India and especially with Kapilavastu, it follows that at an early date a regular intercourse must have been established between the two countries. Thus, we read in the sacred books of merchants from Ukkalā or Suvarṇabhūmi (these are the ancient names of Burma) who carried on business in Central India. Two of these merchants came in direct contact with the Buddha himself, as is reported to us in one of the oldest texts. (*Mahāvagga*, Book I, Chapter 4.) The account is naturally somewhat fantastically embellished, still I assume with certainty that a historical kernel underlies it. It is stated there that the Tathāgata was seated at the foot of the Rājāyatana tree sunk in deep meditation, when there came up to him two men named Tapussa and Bhallika from Ukkalā bringing to the Buddha rice cakes and honey, offering the same to him as a present from themselves. The Buddha thought that "the Tathāgata do not take any food in their hands; how then shall I receive these rice cakes and honey?" Upon this the four Mahārājās of the four directions produced before him four stone utensils, in which the Buddha received the offered rice cakes and honey. These two merchants thus became the first lay disciples of the Buddha. This account in the *Mahāvagga* is confirmed by the inscription on the Shwe Dagon Pagoda at Rangoon, which dates from the year 1485 during the reign of king Dhammacheti. This king sent out eleven monks to Ceylon to enable them to receive their Upasampadā consecration at the celebrated Mahāvihāra, since their own ordination had become null, as they had not observed the prescriptions of the *Vinaya*. The pagoda of Shwe Dagon itself is said to have been built in the life time of Gotama; though, of course, this is mere legend. The inscription repeats the account as given in the *Mahāvagga* and adds that both the merchants received eight hairs from Gotama, which they took back to their country and enshrined in their pagoda on the summit of the Tamagatta Mount, east of the city of Asitanjanagara.

Both these accounts differ only in one essential point. For while in the *Mahāvagga*, the two merchants came from Ukkalā overland, the Shwe Dagon inscription states that this journey was made by ship. From this it appears that the compiler of the *Mahāvagga* understood Ukkalā to be Orissa, which is a province of India, from where one could journey overland to the Rājāyatana tree. Dhammaceti, on the other hand, the author of the inscription on the Shwe Dagon, understood by Ukkalā the territory at the foot of the Shwe Dagon Hill stretching up to the Irāvadi, where a number of colonists from further India must have settled at an early date. Hence he makes the two merchants voyage in a ship.

When we look into the later Buddhist Literature we find the history of Tapussa and Bhallika also in the commentary of Buddhaghosha to the *Vinaya*; and to the *Anguttaranikāya*, which is a production of the 5th Christian century. There also the city from where they came and where they erected the pagoda on their return is called Asitanjananagara, just as in the inscription on the Shwe Dagon. Accordingly, there seems to be no doubt that Buddhaghosha, too, the most celebrated of the later Buddhist theologians, had in his mind Burma and not Orissa, and that the Shwe Dagon Pagoda was actually built on the spot, where the two merchants buried the hair relics presented to them by Gotama. The name Dagon can be traced to an old Tikumbha "the three alms bowls", and with this is linked the legend that Gotama and his two favourite disciples, Siriputta and Moggallāna had buried their alms bowls at that place. The name came into use first in the 16th century, while before that time the pagoda was called Singuttaracheti. Buddhaghosha's testimony is, therefore, of special value, in as much as he composed the greater number of his *Commentaries* in Burma, after he had spent some time in Ceylon with a view to study the sacred scriptures at the latter place. The Burmese historians even assert that he was born in their country. But this is contradicted by the evidence of the *Mahāvamsa*, which alleges his birth place to be in the vicinity of the holy Bodhi Tree, and, therefore, is not to be accepted as a historical fact. The identity of Ukkalā and Burma, as asserted by Buddhaghosha, is no doubt, (as Kern indicates,) in conflict with the statement of the *Lalita-Vistāra*, which places the home of the two merchants in a country to the north of the Deccan, and it likewise is not in accord with the information of the Chinese Pilgrim Hiuan-Tsang, who makes the merchants come from Baktria. But the *Lalita-Vistāra* has proved itself in many cases to be an unreliable source and the expression "northern country" is so vague that it might indicate almost any country. As regards Hiuan-Tsang he is a great authority for Northern Buddhism; but, he has little knowledge of Southern Buddhism, and when his evidence is in conflict with that of Buddhaghosha, we must explicitly give precedence to the latter.

We assume, therefore, that the first two lay disciples of Gotama originally came from Burma; but that is not the same thing as to say that Buddhism had already been introduced into Burma by that time. That event took place after the Council of Pāṭaliputra, which was held under the patronage of king Aśoka. At this Council, at the suggestion of Tissa Moggaliputta, it was resolved to send out missionaries to various directions with a view to proselytise the surrounding countries to Buddhism. Both the children of king Aśoka, Mahinda and Sanghamittā, went over to Ceylon; to Burma went the apostles Sona and Uttara. These two arrived there after a long journey, because the country was at that time in the possession of a sea monster who was working havoc there. The apostles succeeded in destroying the monster and naturally gained unexpected success in their mission of proselytisation. Two-thousand-five-hundred men and one-thousand-five-hundred women forthwith accepted monkhood, and the kings of the country thence-forward bore the name of Sonuttara.

The port where Sona and Uttara landed in Burma was called Golanagara or Golamattikānagara, and lay some twenty miles north-west of the capital, Thatōn. The late Doctor

Forchhammer, who rendered considerable service to the archaeology of Burma, discovered there tolerably extensive ruins which go to prove an old settlement at the place. The name of the city in an inscription at Kalyāni belonging to the 15th century is explained so as to suggest that it consisted of earthen houses after the style of those constructed by the Gnala or Gola in India. It was also probably an old Indian colony from pre-Christian times similar to the one mentioned above at the foot of the Shwe Dagon Hill. In the 16th Century the city was called Takkala, and at present it is named Ayetthima. Forchhammer attempted to identify this Golanagara with the territory called Kalah mentioned by Arab geographers, and accordingly propounded quite a new hypothesis with reference to a question which had already been taken up by Sir Emerson Tennent and others. The Arabs speak about a kingdom, which bore the name of Zabedj and extended in the 8th and 9th Centuries over the Islands to the south and east of Malacca, and consequently to Java, Borneo, Sumatra, etc. To this kingdom belonged likewise the southern extremity of India and also the country in question called Kalah. This place was the centre of commerce in aloes, camphor, sandalwood, ivory, and lead. The ships coming from the east, China, and from the west, Persia, met at Kalah and exchanged their respective commodities. This Kalah therefore, must have been situated somewhere in the Indian Ocean and the supposition of Sir Emerson Tennent that it would be Point-de-Galle in Ceylon has nothing improbable about it. Even this day Ceylon constitutes the centre of commerce and the meeting point of passengers in the Indian Ocean, and if Point-de-Galle has been replaced as a port in course of centuries by Colombo, it was because the port of Point-de-Galle is in the first place unsafe, and secondly, because, it was the government which directed the intercourse towards the capital Colombo. In the accounts of the Arab geographers we come across a group of islands which must have existed in the vicinity of this ancient Kalah, and this has probably placed us on the right track. Sir Emerson Tennent thinks in this connection of the Maldive Islands but that is scarcely probable, because, the Maldive Islands lie two and a half days' journey west of Point-de-Galle, a situation which must have proved one of great distance for the then commercial circumstances. Perhaps we would be nearer the mark if we understood by Kalah the north-west coast of Ceylon, for, as a matter of fact there does exist a group of islands in close proximity, which constitutes what is called the Adams Bridge, and which was even a connecting link with the main land in pre-historic times. In the immediate neighbourhood of Kalah lived according to Cosmas Indicopleustes the king who had the hyacinth (ἀνὰ ἑξῆς τὴν πόλιν) which is an attempt at transcribing the precious stone district in Ceylon at present called Sabara Gamuva, and with it was connected the land where the pepper goods i.e. the district between Puttalam and Adams Peak which is known in modern times by the name of Maha Oya. The Arab geographer Abu Zayid further narrates that the country in his time was subject to two kings . . . the one was the Sultan of Zabej whose domination extended over Malacca, the Sunda Islands, and Travancore, the other was a Singhalese king who lived as a dependent on the Sultan.

Of another opinion is the author of the anonymous work on Ceylon which appeared in 1876 in London under the title, "Ceylon, a general description of the Island, historical, physical, and statistical." He is of the view that the vessels which plied between China and Persia must have sailed from Cape Comorin straight over the Gulf of Bengal to the Nicobar Islands; they must have touched at the port of Kalah which must have been in that case one of the islands or peninsulas belonging to Hinter India, possibly, the modern Kedah near Penang. There is nothing more to adduce in support of this hypothesis except the more or less questionable similarity of pronunciation between Kedah and Kalah. This hypothesis, however, has more of probability in it than that of Forchhammer, because, the vessels must have sailed past Kedah, while in order

to call a halt at Golanagara, they would have to make a long detour towards the north. I therefore, remain an adherent of the view of Sir Emerson Tennent concerning the situation of Kalah; only for Point-de-Galle I would substitute the north-west coast of the Island of Ceylon.¹

We will now leave Burma and the questions connected with it and cast a glance at the Sunda Islands. The date of the first colonisation is here also a matter of doubt, though the place whence the colonists immigrated was in all probability Kalinga, the district to the north of the mouth of the Godavary. The name Kalinga or Kaling, which is the designation bestowed by the Chinese on the Javanese, is no strong proof of this, for, the Chinese so call all the Indians who crossed over the ocean to the Celestial Empire. But it is very likely that they originally came from there, because it was also the provenance of the Singhalese. The Chinese Pilgrim Fa-Hian, who landed at Java about the year 413 on his return voyage from India to China, and sojourned there for a time, found an Indian civilisation in full growth. Brahmans and the so called heretics, as Fa-Hian calls all Shaivites, were in large numbers, while there were few or no Buddhists at all. This is confirmed by Sanskrit inscriptions in western Java and east Borneo, which to judge by the formation of the alphabet must be at the latest as old as the 5th Century. From these inscriptions, which are of a Vaishnavite character, we can conclude that both Java and the east coast of Borneo were hinduised prior to the 5th Century. Moreover, we learn from a Chinese report that in the year 435 there reigned in Java a prince, whose name was the pure Indian Dhâravarma and his title Sri-pâla. We possess documents belonging to Java and composed in its native language, the *Kawi* from the 9th Century. From this it follows that about that time the country was completely Hinduised and that there were traces of Buddhism in the Mahâyâna form. Probably, the Buddhists had immigrated to Sumatra and Malacca in the 5th Century soon after Fa Hian's visit. This is supported by the Sanskrit inscriptions of Kedah and province Wellesley, as well as of the celebrated temple of Boro Bodor, the most extensive Buddhist structure in existence. According to the opinion of Fergusson and Burgess, the temple was completed in the 7th Century and its construction must have taken somewhere about a hundred years so that its building was probably commenced in the 6th Century.

We find Indian influence equally in Sumatra, although not in such a high degree as in Java and Bali. The alphabet which is used in Sumatra can be traced to an Indian origin, and the language has adopted a number of Sanskrit words. There are tolerably numerous names of places of Sanskrit origin. Buddhism must have flourished there from the 10th to the 14th Centuries, as can be inferred from several inscriptions and ancient buildings. Of all the islands of the Archipelago, Java alone seems to have admitted the division into castes according to the Hindu model, and this is an indication of Brahmanical and not Buddhist influence, for the Buddhist strove to do away with caste. The most prominent Brahmanical sect in Java was the Shaivite. Shaivism and Buddhism were the two officially recognised religions in Java, just as they are in Nepal of to-day where the King and the ruling classes are Shaivites, whereas the mass of the people do homage to the Buddha. We even find a kind of syncretism of both the religions in Java, in as much as the Buddha is regarded and adored as younger brother of Siva. At great festivals like that of Pañchalikrama, it so happens that four Shaivite and one Buddhist priests officiate in co-operation. The Buddhist priest turns his face towards the south, three of the Shaivites facing the three remaining cardinal points and the fourth sitting in the centre. We see from this that the Buddhists of the Sunda Islands were far from fanatics and allowed the adherents of other faiths to live there undisturbed. The situation was probably similar to that obtaining in Ceylon though in an inverted order, for the Buddhists were the first to occupy Ceylon, Hinduism having crept into the island only at a subsequent period along with Tamil immigrants. There, too, we meet with, as at Dondra on the southern coast, in one and the same temple images of the Buddha, of Vishnu, of Gageśa, and the holy Bull from Tanjore, all of them being installed there without mutual disturbance or error in the prayers offered by the faithful of these various creeds.

¹ There is much more to be said for Kalah=Kedah than the author seems to be aware of.—Ed.

PARAMAJOTISTOTRA

An Old Braja Metrical Version of Siddhasenadivākara's Kalyāṇamandirastotra.

BY L. P. TESSITORI, UDINE, ITALY.

I found this vernacular version of the famous *stotra* by Siddhasenadivākara in a Jaina MS. pertaining to the Indian Collection in the Regia Biblioteca Nazionale Centrale of Florence. The MS. is registered in Pavolini's catalogue under No. 674. It consists of 15 leaves, with 12 lines on each page, but it is unfortunately incomplete, some leaves at the end having been lost. As the colophon is wanting, it is not possible to fix the date of the MS., but the general appearance of the paper and of the script are sufficient to show that it was copied at a comparatively modern time. On the cover we read the title, *Digambarastotrāṅgi*, which is quite probably the title we should find in the colophon, if the last leaf of the MS. had been preserved to us. It is, in fact, a collection of *stotras*, partly in Sanskrit and partly in Bhāṣā, of which only the first four have been preserved. These are the following:—

(a) The *Pañchamaṅgala* by Rūpachanda, in Old Braja, from page 1b down to page 8a. It contains 25 stanzas in all, divided into five parts named respectively: (1) *Prathamamaṅgala*, (2) *Janamamaṅgala*, (3) *Tapakalyāṇaka*, (4) *Jñānakalyāṇaka*, (5) *Nirṛṇakalyāṇaka*. It is a *māṅgalagīta* commemorating the five most salient points in the life of the Trailokyanātha Sudarajinavara, from the dreams seen by the mother of the Jina down to his attainment of the *nirvāṇa*. In the last stanza (25th) the author records his name.

(b) The *Vishāpahāraṣṭotra* by Dhanapjaya, in 29 Sanskrit stanzas.

(c) The *Aikībhāvaṣṭotra* by Vādirāja, in 26 Sanskrit stanzas.

(d) The *Paramajotistotra*, in Old Braja, from page 14a down to the foot of page 15b, deficient at the end, owing to the loss of the subsequent leaves of the MS. The text reaches to the beginning of stanza 26 and, therefore, 18 stanzas are wanting.

Though incomplete, this *Paramajotistotra* is, no doubt, of the greatest interest. It derives its value partly from its excellence as a translation; partly also, and perhaps chiefly, from the particular form of language, in which it is couched. The work is, in fact, a metrical version of Siddhasenadivākara's *Kalyāṇamandirastotra*, in which the author has displayed an ability that is very rarely found in similar works. It was, indeed, no easy matter to put into a different language the often intricate meaning of the Sanskrit *stotra*, retaining all the puns that are met at almost every step in the latter; and, what is more, to put it into stanzas having verses rhyming with each other and corresponding exactly in number with the *vaṇtatīlakās* in the original; even to outdo the very Sanskrit text in conciseness, by recasting the whole content of each *vaṇtatīlakā*—without omitting any important particular—into stanzas numbering a smaller amount of syllables. How far the author has succeeded in this effort, the reader will judge for himself. In some passages, indeed, the vernacular version seems to be much more elegant than the Sanskrit original by Siddhasena himself. The work takes its name of *Paramajotistotra* from its beginning, after the example of the *Kalyāṇamandirastotra* itself and of many other *stotras* of a similar kind, such as the renowned *Bhaktimara*.

As to the probable author of the version—though it cannot be presumed that any positive conclusion on this question will ever be attained, owing to the scanty evidence,—I think there is a circumstance that may perhaps lead to his determination. Namely, the fact that the *Paramajotistotra* shares with the *Pañchamaṅgala*, the first work in the collection, not only the same language, but even the same linguistic peculiarities; and that the external affinity between the two works is such that it cannot be explained except by the assumption that both of them were composed in the same place and at about the same time, and, perhaps, even by the same poet. If it be correct to go as far as

the latter conclusion, it is with the Rūpacanda of the *Pañchamaṅgala* that the author of our version should be identified.

Turning to the form of the language in which the *Paramajotistotra* is written, I have to make some further observations concerning what has been stated above. The language is, in fact, Old Braja, but this statement would be altogether incorrect, if it were understood to imply that the version was made within the area where Braja is spoken at the present day. It is well known (and here I mean to refer chiefly to Sir G. Grierson's authority) that in former times the use of the Braja Bhākhā was spread towards the West far beyond the limits of the territory, where it was spoken. Indeed, for many centuries Braja has been the common polite language, in which poets of the Western Gangetic Valley, Rajputana and even Gujerat used to compose their works. When so used for literary purposes by the poets of the West, it was called Piṅgaḷa, and in contradistinction to it the dialects peculiar to each of the various countries, when they were used in poetry, were called Diṅgaḷa. But the use of the latter for literary purposes seems never to have been so widely extended as that of the former. Now, it can be easily conceived that the adoption of the Braja by the poets in such countries as possessed a vernacular of their own, and differing from it, could not take place without the Braja growing more or less corrupt through the introduction of strange elements and foreign words, borrowed from the peculiar dialect of the writer. The resultant, then, was a form of language, that in its main features was Braja, but at the same time contained many peculiarities, which were not consistent with the latter and could be explained only by a direct reference to Mārwaṛī or Gujaraṭī.

This is precisely the case with the language, in which our *Paramajotistotra* is composed. It is Old Braja mixed with alien elements, which clearly point to the West for their origin. Such are: *सुविनी* "dreams," *कर्मे-तणी* "of the actions,"¹ two instances of the plurals in—*वा* as are met in all the dialects of the Rājasthānī and Gujaraṭī; *ए* "this, these," for the singular and plural forms of the demonstrative pronoun, which in Braja ought to be *इह* and *ये* respectively; *जे* "who," for the plural of the relative pronoun, instead of the Braja forms *जो* or *जो*; *बलि* "says," for the third person singular of the simple present, instead of *बले*, which is the only form that is possible in Braja; *करै हे* "is doing," an instance of the definite present, which is not very common in Braja, whilst it becomes the rule in Mārwaṛī and in the other dialects of the West; *होसी* "will be," an example of the sigmatic future, which is not found to exist in the Western Hindi, etc. Indeed, some of these as well as other forms, besides pointing to the West, seem to point also to an early stage in the formation of the vernaculars. In other words there are some peculiarities, which, though they may happen to have their correspondents in the dialects of Rajputana and of Gujerat, might be as well explained by a direct reference to the Apabhraṃṣa. Such are for instance: the postpositions *तणी* and *तणी* of the genitive, which are liable to be directly chained to the corresponding forms: *तणइ* and *तणी* in the Apabhraṃṣa; the inflected locative singular ending in *-इ*, *-इ*, of which there are traces in all forms of Bhākhā and which likewise occurs in the Apabhraṃṣa; the pronominal forms *कोण* "who?" for the interrogative pronoun, and *किस* "how?" for the interrogative adverb of manner, both of which are derived from the Apabhraṃṣa forms: *कवण* and *को*, and the latter has spread so far in the East that it is found even in the Old Baiswāṛī of Tulasi Dāsa; and finally the forms *जरिसो*, *तरिसो*, for the pronominal adjectives of manner, which are even older than the corresponding forms *जइसइ*, *तइसइ* of the Apabhraṃṣa, and for the explanation of which one must refer to the Prākṛit. Further, there are some other forms, which are rather to be considered as Kanaṇjī peculiarities, like *इहि*, *जिहि*, *किहि*,² which are used for the oblique singular of the

¹ These two forms, as well as some of the others mentioned below, are not met in the *Paramajotistotra*, but only in the *Pañchamaṅgala*.

² The MS. often reads *इह*, *जिह*, *किह*.

pronouns. Quite peculiar are the forms होहि "is" and होहि "are," for the 3rd persons singular and plural of the simple present of the substantive verb, both used in their original indicative meaning and therefore corresponding to the Braja हे and हे, respectively. I believe, they are to be explained as having arisen from two hypothetical forms : *हवाहि (हवइ) and *हवाहि* of the Apabhramṣa, which, though they have not yet been found, may reasonably be supposed to have existed beside the more recent forms होइ and होति. As for the ह being retained in the terminations : हि, -हि*, instances of the same are not wanting in Old Hindi. Lastly, there will be noticed the use of the old genitive in-ह, which is also commonly found in the Old Gujarātī as well as in Canda's poetry, and in the latter it appears to have superseded almost all other cases. In the same way, it will be found used with a meaning different from that of the genitive case in the example गुणह गभीर in the 2nd *chaupāī* of the *Paramajotistotra*.

The conclusion, then, to be drawn is that the *Paramajotistotra* was written at a rather early period in the history of the Bhāṣā, which it is not possible to determine at the present day, and in a country lying to the West of the area where Braja was spoken. Whether this country was Rajputana or Gujarat, cannot be easily ascertained. The fact that some of the Western peculiarities, that have been treated of above—as for instance ए for the singular of the demonstrative pronoun and किं for the interrogative adverb of manner—seem to point rather to Gujarātī than to Rājasthānī, is of no great account in this question, as at that time the difference between the vernaculars of Gujarat and of Rajputana was much less distinct than at the present day. Be it remembered that both forms of speech have come out of the same stock, viz., the Cauraseni Apabhramṣa, and that their mutual connection still appears as a very close one, if we only compare the Old Gujarātī with the Old Mārwāri.

I need not expend words in illustrating the contents or showing the literary importance of the *Kalyāṇamandirastotra*,—the original, of which our *Paramajotistotra* is a version—nor shall I dwell on its being an imitation of Mānatunga's *Bhaktāmaraṣṭotra*, and still less on the questions concerning the probable identification of its author Siddhasenadivākara. For all these particulars, the reader may directly refer to Prof. Jacobi's introduction to the edition of the *stotra* in the *Indische Studien* (Vol. XIV [Leipzig, 1875], pp. 376-377) and to Paṇḍit Durgā Prasāda's introductory note to the edition of the same *stotra* in the *Kāvya-mālā* (Guchchhaka VII [Bombay, 1907], p. 10). Let me only say, in explanation of the fact that the present version is included in a Digambara MS., that the *Kalyāṇamandirastotra* is read by the Digambaras as well as by the Śvetāmbaras.

The metre, in which the *Paramajotistotra* is arranged, is partly the *chaupāī*, partly the *dohā*. The part of the work, that has been preserved to us, comprises 26 stanzas in all, out of which 18 are *chaupāīs* and the other 8 are *dohās*. The first stanza, from the initial words of which the version takes its name, is not found in the Sanskrit original, and is, therefore, to be regarded as an addition by the vernacular poet.

As regards the Braja text, which follows below, I wish further to note that I have tried faithfully to reproduce the reading of the MS., as far as it was consistent with the laws of grammar and prosody. So, I have kept purposely unchanged :—the sign ए, without substituting for it ए; the frequent inorganic nasalization of the vowel ए, before ए, न, म, ह; the frequent substitution of ए for original इ, उ, and of ए for म, etc. On the other hand, I have silently corrected all evident blunders like the substitution of इ for उ and the omission of the dot of the nasals, and I have kept carefully distinguished from the ए the ए, for which the MS. has no special sign. All other cases, in which I venture to differ from the reading of the MS., will be found recorded in the critical notes at the foot of the text. Their being so copious should not be imputed to any excess of scrupulosity on my part, but rather to the great incorrectness of the MS.

* The latter substitution is to be regarded as a Western peculiarity.

अथ परमजोतिस्तोत्र ॥

दोहा

परम-जोति परमात्मना परम-ज्ञान-परवीन ।

बन्धो* परमानन्द मे* पति पति अन्तरलीन ॥ १ ॥

चौपाई

निर्भे-करन परम-परवीन । भव-समुद्र-जल-तारण कोण ।

शिव-मन्दिर अघ-हरन अनिन्द । बन्धो* पात-चरण-अरविन्द ॥ १ ॥

मन्द-मान-भञ्जन-वर-वीर । गिरजा-सागर गुणह गभीर ।

पुरपुर पार लहे नहि* जास । मे* अज्ञान जपहु जत तास ॥ २ ॥

प्रभु-सकप अति-अगन अघहि । क्यो* हम-से-वे होय निबहि ।

क्यो* दिन-अन्ध अहू* को पोत । कहि न सकै रवि-किरण-उद्योत ॥ ३ ॥

मोह-हीन जाणै मन-मोहि* । तो-उ न तुम गुण वरणै जाहि* ।

प्रज्ञे पयोधि करै जल-बोन* । प्रगटे रतन गिणै ते कोण ॥ ४ ॥

तुम असंघि-निरमल-गुण-पानि । मे* मति-हीन कहौ* निज-बानि ।

क्यो* बालक निज-बाह पसारि । सागर-परमति कहै विचारि ॥ ५ ॥

जे श्रीगेन्द्र करै तप-वेद । ते-उ न जाणै* तुम गुण वेद ।

भाव भागति मनि मुक्त अनिलाप । क्यो* पपी बोलै निज-भाष ॥ ६ ॥

तुम अस महिमा अगन अपार । नौव एक विभुवन-आधार ।

आवे पवन पद्म-सरि होय । श्रीवन-तपति निवारै सोय ॥ ७ ॥

तुम आपत भवि-जन पद-मोहि* । कर्म-बन्ध सिधल होय जाहि* ।

क्यो* चन्दन-तरि बोलै मोर । डरै भुयङ्ग लगे चहुँ चोर ॥ ८ ॥

तुम निरपत जन हीन-दयाल । संकट-सै छूटे* ततकाल ।

क्यो* पशु घेरि लेहि* निसि चोर । ते तजि भागत वेपत मोर ॥ ९ ॥

तुम भवि-जन-तारक किन होय । ते चित धारि तिरै* जे तोय ।

यो* ऐसो करि जाणि सुभाव । तिरै मसक क्यो* गरमि-बाव ॥ १० ॥

जिन सब वेद किये वसि वीम । ते* जिन-मे* जीत्यो सो कोम ।

जो जल करै अगन-कुल-हानि । पदवानल पीवे सो पानि ॥ ११ ॥

तुम अमन्त-गरवा-गुण जिबे । क्यो* करि भगति-धरो* निज-हिबे ।

ए लघु-रूप तिरै* संसार । यह प्रभु-महिमा अगन अपार ॥ १२ ॥

कोध-निवार किये मन-शान्ति । कर्म-सुन्द जीते किहि भोति ।

१) परमात्मा, ज्ञान; २) अघ; ३) गभीर, नदी, जल; ४) आणो, नाहि, परते (instead of प्रले), कोण; ५) मुक्ति, कहौ; ६) महिमा, एक, विभुवन, तिर; ७) कर्मनिबन्ध, भयं, डर; ८) छूटे; ९) तवि (instead of भवि), यो, ऐसो; १०) जिन, कीये, क्यो, हाणि, पान; ११) वेद, महमा; १२) कीयो, किह, पदवन, नीरजविरप.

* For: गरिमा;

* From: अलूक < उलूक;

* Contracted form from वमन.

* An instance of the emphatic particle हु having combined with the final inherent अ of the word to which it was added.

यह पटतर देख्यौ संसार । नील-विरप ज्यौ^१ रहै इतार ॥ १३ ॥
 मुनि-जन हिये कमल निज दोहि । सिद्ध-रूप समधावै^२ तोहि ।
 कमल-कणिका बिन महि^३ और । कमल-बीज उपजन-की वार ॥ १४ ॥
 जब तुम ध्यान धरै मुनि कोय । तब विदेह परमात्मा होय ।
 जैसे धात सिलातन त्यागि । कनक-सरूप धरै जब आगि ॥ १५ ॥
 जा-के मनि तुम करै निवास । बिनसि जाय क्यौ^४ विषह तास ।
 ज्यौ^५ महन्त बिधि आवै कोय । विषह-मूल निवारै सोय ॥ १६ ॥
 करै^६ विविध जे आत्मा-ध्यान । तुम प्रभाव-तै होय निर्धन ।
 जैसे नीर सुधा अनुमोनि । पीवत विष-विकार-की शोनि ॥ १७ ॥
 ज्यौ^७ भगवन्त विमल-गुण-जीन । समल-रूप मानै मति-हीन ।
 ओ नीलजा-सेग द्विग गहे । वरन विवरन सहु सो कहे ॥ १८ ॥

दोहा

निकट रहत उपदेश छनि तर-वर भये असोक^८ ।
 ज्यौ^९ रवि उगतै जीव सब प्रगट होत भव-लोक ॥ १९ ॥
 समन-वृष्टि जे सुर करै^{१०} हेठ वृन्त-मुष सोय ।
 र्यौ^{११} तुम सेवत सुमन-जन बन्ध अपोमुष होय ॥ २० ॥
 उपजि तुम हिये बसधि-तै सोनी सुधा-समीन ।
 जिहि पीवत भवि-जन जहे^{१२} अजर-अमर-वह-धौन ॥ २१ ॥
 कैरै इतार तिहँ लोक-कौ^{१३} ते सुर-चानर शीय^{१४} ।
 नाव-साहित ओ जिन नगै तामु गति उरध होय ॥ २२ ॥
 सिद्धासन गिरि नेह सम प्रभु-भनि गरजित घोर ।
 स्वाम सुतन घन-रूप जधि नाचत भवि-जन-घोर ॥ २३ ॥
 छवि-हत होहि^{१५} असोक-वन तुम-आ-मण्डल देखि ।
 भीतरग-के निकट रहि रहै नैराग विसेधि ॥ २४ ॥
 सीप कहे तिहँ लोक-कौ^{१६} ए सुर-कुम्भ-नि-नाह ।
 शिव-पथ-सारथवाह जिन भज्यौ तज्यौ परमाह ॥ २५ ॥
 गनि छत्र शिखर उचित

१४) हीरे, कीर्णिक (for कणिका), बिना, नहीं, और, वर; १५) परमात्म, ध्ये, आग; १६) विनिधि, ज्यौ (instead of क्यौ), विगृह; १७) विविध, आत्म, निर; १८) उति, ज्यौ, गह, स्वो; १९) उगत; २०) वृष्टे, कैर है, बीड (for वृन्त), सीर, अपोमुष हाह; २१) उपजी, हीरे, जिह, भवी; २२) इतार, स्वर (for सुर), सहव, तद्य, होह; २३) गिर, घेर; २४) जिन; २५) विभवन.

* Observe that the caraga is faulty.

ON THE PRONUNCIATION OF SANSKRIT.

BY P. T. SRINIVAS IYENGAR, M.A.; VIZAGAPATAM.

It is frequently urged, as one of the excellences of Sanskrit, that its alphabet is scientific and perfect, unlike the English alphabet, which is both superfluous and defective. But it is not so well-known, that while the spelling of Sanskrit words is fixed for all time, its pronunciation varies so much from province to province that there are comparatively few letters whose values are the same all over India. When this is pointed out to a Hindu, his first impulse is to maintain that his pronunciation, i. e., that of his district, is the correct, ancient one of Pāṇini and the Rishis that preceded him, and that all others are wrong. I have heard a Tamil Brāhmaṇ (and a professor in a Government College who has passed a high Examination in the Science of Language) maintain that the Tamil pronunciation of Sanskrit is the only perfect thing, though the Tamil land is several thousand miles far from that where Sanskrit was first evolved, and though Sanskrit did not reach the Tamil land until many hundred years after it was born. On the other hand I have known Hindi gentlemen, great Sanskrit scholars, believe that the confusion in speech between *śh* and *ś* prevalent in North India was part of the original perfection of the Sanskrit (perfected) tongue! As a matter of fact there is no right or wrong in these matters. As every flower has a right to exist and the one with narrow petals is not more correct than the one with broad ones, all forms of pronunciation are correct, each in the district or caste or clan where it prevails, and no one form is superior to another. Pronunciation, like other manifestations of life, changes in accordance with individual environment.

Firstly as time goes on the sounds of a language change. It has been proved that Sanskrit has levelled down original Indo-Germanic *a*, *e* and *o* into one uniform *a*, whereas the original sounds have been preserved in Greek, Latin and other languages. Cf. Sans. *pañcha*, *janas*, Gr. *pente*, *genos*: Sans. *cha*, Lat. *que*; Sans. *chal*, A. S. *hwel*; in all which cases the Sanskrit *e* is a later formation than the *e* or *o* of the other languages. That Sanskrit long *e* and long *o* are developments of *ai* and *au* is well-known to our Grammarians, but this is only a case of Indo-Germanic *ai*, *ei*, and *oi* becoming first *ai* and then long *e* in Sanskrit and *eu*, *ou* and *au* first becoming *au* and then long *o*. Compare Gk. *aithos*, Sans. *ādhas*, Gk. *teikhos*, Sans. *dēha*; Gk. *oīda*, Sans. *vidā*; Lat. *aug-ere*, Sans. *śjas*; Gk. *reuma*, Sans. *śrō-tas*. While Sanskrit has wandered further from the parent Indo-Germanic in its vowel system than its sister-languages, it has preserved the original consonant system better. But even here, there have been wide changes. In the Indo-Germanic there were two sets of *k* sounds, as to-day Arabic has, a velar and a palatal. These as well as the labialized velars were fronted, when followed by front vowels *e*, *i*; thence arose in Sanskrit the sounds of *ś*, *j*, *ṣ*, *ṣh*, *śh*, etc. Thus the roots *śt*, *jtv*, *har*, *kal*, *śhal* represent an earlier *kei*, *gwei*, *gher*, *qel*, *qwel*.

Most of these changes from the Indo-Germanic to the Sanskrit have been revealed by the historical study of languages conducted by modern investigators. The method of Sanskrit Grammarians was purely analytical; it consisted in tracing forms to their roots (real or imaginary) and it is obvious that this method cannot but lead to laws of word formation, which may be practically useful but are not true as facts of history. The study of the growth of man based on anatomical considerations and intelligent inferences from the dissection of a number of corpses as to how man's body must have been put together may lead to very interesting results, but these results are likely to be very different from the real story of man as revealed by Comparative Zoology and Embryology. Psychology, till recently, analysed the grown man's mind into faculties and proceeded exactly like Pāṇini's grammar; and as the growing science of Comparative Psychology has upset the old Psychology, so Comparative Grammar has upset the older Sanskrit Grammar. Thus in *t-ti*, the *e* representing *ei* of Indo-Germanic is surely not derived from *t*, the so-called root. The *k* of *mukta*, *rikta*; is not a modification of *ch* as Pāṇini says, because the Indo-Germanic analogue of their so-called roots *muk*, *rich*, are *meuk*, *leitw*; similarly the *gh* of *ghnanti* is more primitive than the *h* of *hanti*.

But even taking Pāṇini at the usual Hindu valuation, there are many difficulties in utilizing his *sūtras* in an investigation of Sanskrit pronunciation. His last *sūtra* is "a" (VIII, iv., 68) and is usually interpreted to mean that though in the body of the *sūtras* vowels have been described to be open (*vieṛita*), short *a* is not open, but close (*saṅkṛita*). This information can be utilized only if we know for certain how short *a* was pronounced by Pāṇini. This letter is pronounced in South India like the *u* of 'but' when accented and like the shortened form of the *e* in 'her' when unaccented. In Northern India when it is unaccented it loses all individuality and practically vanishes. In Bengal and Orissa, the accented *a* approximates to *o*. In which of these ways did Pāṇini intend the *saṅkṛita a* to be made? This is a question difficult to answer. And then there is the further question, whether these different pronunciations of *a* are far off reminiscences of the fact that Sanskrit *a* represents Indo-Germanic *a*, *e*, and *o*. Again in modern Hindi we certainly hear short *e* and short *o*. Whence come these sounds?

It is fairly well-known that the Hindus are divided into two great groups, the five Gauḍas and the five Drāviḍas. These groups are distinguished from each other, firstly by the fact that the Brahmins of the former group eat fish and the flesh of "five five-nailed" animals, and those of the latter do not, and secondly by the fact that the Drāviḍas pronounce *ṛ* and *ṛ̥* as *ṣh* and *ṣ*, and the Gauḍas in many cases pronounce them *kā* and *j*. Thus when they begin words or syllables, there are invariably *kā* and *j*; *jamā*, *jamund*, *khaṭ*, *pūkkhar*, *y* in the middle of a syllable is *y* as in *syāt*; *ṣh* when it is the first part of a conjunct consonant is sometimes attempted to be pronounced, and then it approximates to *s*, thus *ṣhaṣṭi* becomes *khaṣṭi*. *ñ*, the nasal of *ch*-series is pronounced alike throughout India, when it preceded *ch* or *j*, but when it succeeds *j* as in the words *yajña* or *jāṇa*, it is pronounced differently in different parts of India. The Tamil has in his own tongue a distinct *ñ* sound, occurring by itself in words, e. g., *ñāyiru* but it cannot be easily pronounced after *j*, so he pronounces these words as *yajña*, *gāṇa*. The North Indian makes the first word *jagya* and the second *gyāna*; the Maratha makes the former *yadnya*.

As regards sibilants, there are four sounds, the English *s*, the Tamil *ś*, the English *sh*, and the Indian *ṣh* sounds, all made by the friction of air passing between the palate, beginning from behind the teeth and gradually receding to the mid palate. There is no difficulty with regard to the first of these sounds. The second is the sound made in South India and the third in North India when reading *ṛ*. Seeing that Pāṇini was a Sindhi, it is probable that he followed the modern North Indian practice. South Indians claim that their pronunciation of this letter is the proper one, but there is no shadow of evidence to prove this, though when a South Indian speaks Sanskrit, the ear can much more readily detect the difference between *ṛ* and *ṛ̥*. But this is perhaps due to the fact that to the South Indian, Sanskrit is absolutely a foreign language, his mother tongue belonging to the Dravidian family and he is therefore *plus royaliste que le roi*. With regard to the last of these sounds, too, there is a difficulty. The Drāviḍa makes the sound by doubling the tongue, and contacting the blade with the middle of the palate. The Gauḍa makes a *kā* of it. Where the South Indian reads *tushāra*, the Gauḍa reads *tukhāra*. The Gauḍa and not the Drāviḍa has spoken Sanskritic languages continuously from the beginning of the historic age in India, and hence his pronunciation must be regarded as the genuine Sanskrit pronunciation and the Drāviḍa one but a modification of it by a foreign tribe attempting to acquire it. The main language of Afghanistan is Pashto in its S. W. parts and Pakhto in the N. E. Here we have over again the Drāviḍa-Gauḍa difference. The S. W. *sh* may be due to the proximity of a Dravidian language, the Brāhūī. It is to be noted that Herodotus speaks of them *Paktues* and the Rig Veda refers to them as *Pakthas*. Apparently Pakhto was the ancient form and Pashto a recent one. This fact renders it probable that *ṛ* was *kā* in Sanskrit till the Drāviḍas made it into *sh*. This view will react on the discussion of certain problems of linguistic science. Collitz derives *keṣṭi* from a root *keṣi* and *kṣayati* and *kṣināti*, both from a root *ghṣed*. But it is a disputed question whether the Indo-Germanic had a *sh* sound. If, as with the Gauḍas, Sanskrit *ṛ* is really *kā* and *kā* is really *kā* and if *ṛ* developed from Indo-Germanic *k* ought to be pronounced *sh*, the above disputed question ought to be rediscussed in the light of this. As an example of a mis-

take due to the ignorance of the Gauda pronunciation of Sanskrit, I may mention that such a scholar as Bloomfield in his *Religion of the Veda*, p. 54, speaking of the Persian translation of the Upanishads made for Dara, says that "the Persian pronunciation of the word *upanishad* is *onpanekat*", whereas it is the Gauda pronunciation. Idg. *neeks* became Skt. *नृक*, which Gaudas pronounce *khaskh*; Idg. *shenk* became *शृङ्ग*, which Gaudas make *khukh*. In this connection it must be remembered that Idg. *sw* in some cases become *s* in Sanskrit and *kh(w)* in Persian; thus the Persian analogue for *śvedas* is *kh(w)oy*, for *śasar* is *kh(w)āhar*, and for *sā-karas* is *khākh*. Curiously enough Idg. *kw* when fronted by the influence of front vowels becomes *s* in Persian, corresponding to Skt. *ś*; thus Idg. *kweit*, Skt. *śvītas*, Pers. *safid*. Hence the history of Skt. *वृ* ought to be rediscussed in the light of these facts.

Scientific conclusions on the gradual changes of Sanskrit sounds are vitiated by four facts, (1) Maharashtra have been the main teachers of Sanskrit Grammar for the past two centuries or more and have imposed their Drāviḍa pronunciation on Sanskrit; and European Scholars have on that account not given the Gauda pronunciation its dues. (2) The Gaudas of Benares have for a long time been under the influence of these Maharashtra and their own pronunciation to-day is a very mixed one. (3) Sanskrit was never the spoken language of the people; it was the *Sanskṛita*, the literary, conventionalized form of the language of the people, first of the Indus valley, then of the Madhyadeśa, and lastly of Magadha and perhaps also of the Maratha country, before it became finally fixed in its present highly artificial form, denuded of syntax, divested of idioms, eminently suited to be the language of scholars, but unfitted to act as a means of registering the changing sounds of a living language. (4) The linguistic survey of Northern India has been conducted by gentlemen without a training in phonetics, and their enquiry has been to some extent vitiated by a belief that Sanskrit is the norm and the languages as spoken are corruptions of the *Sanskṛita bhāṣā*.

My object is not to solve these problems, but merely to prove that the Sanskrit alphabet is not devoid of perplexing difficulties, nor is Sanskrit pronunciation an invariable fixed thing as people usually suppose. To one who knows the facts of the case and is not blinded by prejudice, it is as full of difficulties, as full of variations, as any other language.

SANTIDEVA.

BY MAHAMAHOPADHYAYA HARAPRASAD SASTRI, M.A., C.I.E.; CALCUTTA.

SANTIDEVA is a great name in the later Mahāyāna literature. He is credited with the authorship of three works: (1) *Bodhicaryāvatāra*, (2) *Sikshā-Samucchaya* and (3) *Sūtra-Samucchaya* (See *Sikshā-samucchaya* of Bendall, Introduction, page IV., on the authority of Tārānātha). *Sūtra-Samucchaya* has not yet been found. But there is ample evidence that this was also written by Santideva, as will be found in the sequel.

Bodhicaryāvatāra has been several times published and even translated into English. It was first published by Professor Minäcf in the eighties. Then it was published in the *Journal of the Buddhist Text Society* by me. I had the advantage of collating a beautiful palm-leaf manuscript belonging to the Hodgson Collection; in the Library of the Asiatic Society of Bengal. In 1893 I acquired a copy of the *Pañjikā* commentary of the work by Prajñākaramati. The manuscript was copied in the year 1078 A.D. in Newāri character. The copyist's name is not given. But he describes the commentator Prajñākaramati as his *tātapāda*, from which it may be inferred that he was a disciple of the monk Prajñākaramati who was a well-known scholar of the Vikramāśīlā-vihāra (See M. M. Satiś Chandra Vidyābhushaya's *Indian Logic, Medieval School*, page 151) and flourished about the beginning of the 11th century. Another

manuscript in Maithili character of the commentary running over the *Prajñāpāramitā* chapter only was also acquired at the same time. Professor De la Vallée Poussin has very nearly completed an edition of the text and the commentary in the *Bibliotheca Indica Series*. The commentary is a store-house of information about the later Mahāyāna School.

The *Śikṣā-samuchchaya* was edited in the *Bibliotheca Buddhica Series* of St. Petersburg by the late lamented Professor Bendall of Cambridge in 1902. He has enriched his edition with the meanings of the rare Buddhist words in English in the form of an index, and in the introduction he discusses the age of the work and the genesis of the passages quoted in the work. In the work Śāntideva rarely speaks himself, but quotes from a very large number of authoritative works. His *Bodhicaryāvatāra* is written in beautiful Sanskrit, very rarely tinged with Buddhistic licenses. The versification throughout is exceedingly musical. Śāntideva wrote at a time when Chinese scholars ceased to come to India. So it was at first thought that his works were not translated into Chinese. But my friend Professor Ohmiya of Tokio writes to me that he has discovered in Nanjio's catalogue of the *Tripitakas*, a work which appears to be a different version of the *Bodhicaryāvatāra*.

Recently three palm-leaves were acquired by me, being No. 9990 of the Government Collection of the Asiatic Society of Bengal, which gives a legendary account of Śāntideva's life. The leaves were written in the 14th century Newāri hand at Katmandu. It represents Śāntideva to have been the son of a Rājā. But unfortunately the name of the capital of the Rājā has been so completely effaced that with all my efforts I could not make out anything of it. The name of his father is Mañjuvarma. (Tārānātha says that Śāntideva was the son of a Rājā of Surāshtra. See Introduction of *Śikṣā-samuchchaya* of Bendall, page 8. But Tārānātha was later than these leaves, on which my paper is based). At the time of his installation as *Furardjā*, his mother pointed out to him that kingship led only to sin. "You better go," said his mother, "where Buddhas and Bodhisattvas are to be found. If you go to the place of Mañjuvajra, you will prosper spiritually". He rode on a green horse and left his father's country. He was so intent on his journey that he forgot to eat and drink for several days. In the thick of the forest a handsome girl caught hold of his horse and made him descend from it. She gave him good water to drink, and roasted goat-meat to eat. She introduced herself as a disciple of Mañju-vajra-samādhi. This pleased Śāntideva greatly. For his mission was to become a disciple of the same *Guru*. He stopped with the *Guru* for 12 years, and obtained the knowledge of Mañjuvāri. After the completion of his education the *Guru* ordered him to go to Madhyadeśa. And there he became a *rant*, viz., a military officer assuming the name of Achalasena. He had a sword made of *devadru* wood, and he soon became a favourite with the king, so much so that other officers grew jealous of him. They represented to the king that this man had a sword made of *devadru* wood. How could he then serve his master as a soldier in times of war? The king wanted to inspect the swords of all his officers. Achalasena represented that his sword should not be seen. But the king insisted, and he agreed to show his sword to the king in private after covering one of his eyes. As soon as the king saw the sword his eye fell on the ground. The king was surprised and pleased. But Achalasena threw his sword on a stone, went to Nālandā, changed his dress and renounced the world. There he got the name of Śāntideva on account of his calmness. He heard the three *Pitakas*, and practised meditation. He got another name too, Bhusuku, because

बुद्धार्थे प्रभास्वरः सुप्तोपि, कुर्वी नमोपि तदेवेति बुद्धकुसुमाधिसनापन्नस्यात् बुद्धकुसुमाधिसर्गतिं सहेऽपि ।

Sometime after the young folk of Nālandā became curious to test his knowledge. It was the custom at Nālandā to hold recitations every year in the month of *Jyāishtha* in waxing moon.

They pressed upon him to give a recitation. There was an extensive *Dharmaśāla* to the North-east of the great *Vihāra* at Nālandā. In that *Dharmaśāla* all the paṇḍits were assembled and Śāntideva was raised to the *śiṃhāsana*. He at once asked

किमर्थं पद्यानि अर्थार्थं वा तत्र कथिः परमार्थज्ञानवान् कथंगतौ-इत्यथ औष्ठादिकः किं कविणा जिनेन प्रोक्तं अर्थैः । ननु प्रज्ञापारमितायौ सुभूत्यादिदेशितं कथमर्थं इत्यनोच्यते सुब्राह्मण्यैवेत्येव

अर्थवदधर्मपदोपसंहितं विधातुसंक्षेपानिवर्हणं वचः ।

भवे भवेच्छान्त्यनुशास इत्येकं सङ्गतं कथमर्थं विपर्ययमन्यथा ॥

तत्राकृष्टं आर्यशौर्यार्थं सुभूत्यादिदेशना तु भगवद्विद्वानादिस्त्वसौवः ।

The paṇḍits became curious, and asked him to recite a work that may be *Arthāśāra*. He resolved in his mind which of the three works, *Sūtra-samuchchaya*, *Śikṣā-samuchchaya* and *Bodhicaryāvatāra*, to recite. And he gave preference to the *Bodhicaryāvatāra*, and began to read :

सुगतान् ससुतान् सधर्मकायान् प्रणिपत्यावृतोऽखिलांश्च वन्द्यान् । सुगताश्चसंपरावतारं कथयिष्यामि वधाग्नं समासात् ॥

But when he came to recite the verse —

यदा न भावो नाभावो मतेः सन्तिष्ठते पुरः ।

तस्मान्मगस्यभावेन निरात्मन्मः प्रशाम्यति ॥

the Lord appeared before him and took him to Heaven. The paṇḍits were surprised, searched his *Paṭhu-kuff*, viz., a student's cottage, a thatched room 17' by 18' and there they found the three works *Sūtra-samuchchaya* and others, which they published to the world.

This is the legendary account of Śāntideva's life given in those three palm-leaves. From this we come to know that Śāntideva was a monk at Nālandā, that he had a *kuff* there, that he was called Bhusuku, and that he was the author of the three works mentioned above.

Reading through *Śikṣā-samuchchaya* and *Bodhicaryā*, we find that he was a Mahāyānist of the Mādhyamika School. Professor Bendall thinks that Śāntideva's Sanskrit works are not altogether free from Tāntrika Buddhism. But from the *Catalogue De Fonds Tibetain* by P. Cordier, *Deuxieme Partie*, page 140, we learn that Śāntideva is the author of a Tāntrika Buddhist work entitled श्रीगुह्यसमाजमहायोगतन्त्रबलिविधिः From a palm-leaf manuscript of चण्डोचर्यविनिधयः in the Durbar Library of Nepal, we learn that to Bhusuku are attributed several works of the *Vajrayāna* schools, viz., the school of the secret and mystic worship of the later Buddhists. I have discovered several songs on the same subject in Bengali attributed to Bhusuku. One of the songs declares him distinctly to have been a Bengali.

48 रागमञ्जारी— सुसुकुपाशानं

वाज्रनाथ पादौ पङ्कजा खान्नें बहिद ।

अथ वज्रजाले केश लुहिद ॥ ध्रु ॥

आजि सुसुकु वज्रजाली भालि—

निष्पपरिणी चण्डजाली जेलि ॥ ध्रु ॥

प्रज्ञापारमिताम्बोधिपरिमयनाममृतपरितोषितसिद्धाचार्यसुकुपाशी वज्रजालिकाध्याजेन तमेवार्थं प्रतिपादयति । प्रज्ञाविन्दुकुहरादे सङ्गुहचरणोपादेन प्रवेशितं तन्नामनादिशम्बोदीत्यादि अक्षरसुखादयवज्रजालिनकहित इति अभिलक्ष्यं कृतं ।

Though the name of his father's capital could not be read in the palm-leaves, it seems that the city was in Bengal. Śāntideva rode into the jungles of Terai where *Mañjuvāra-samādhi*, his *Guru*, had a *tapovana* similar to that of Divākara in *Harṣacharita*. The *Guru* asked him to go to Madhyadeśa in which term Hiuen Tshang included Magadha and which the Nepalese still use in the corrupted form, Madhessa, in the same sense. Bengal is beyond Madhyadeśa. So Mañjuvāra would be justified in asking a Bengali to go to Madhyadeśa.

As to the age of *Sāntideva*, written as *Jayadeva*, by mistake, on page 106 of Cambridge *Catalogue* of Professor Bendall, while treating of *Śikṣhā-samuchchaya*, it is stated that the work was compiled by Jayadeva in or about the 7th century A. D. But he reconsiders his position in his introduction to the *Śikṣhā-samuchchaya*, and puts him down between the death of *Śrīharaḥa*, in 648 and the translation of the work under the celebrated Tibetan king *Khri-lde-aron-btsan*, who reigned 816-838 A. D. If so, the Bengali songs attributed to Bhusuku would be as old as the 7th century though the songs belong to the Sahajīa School of Buddhism, which seems to have branched out from Vajrāyāna or may be identical with it.

It may not be out of place to mention here how unhistorical Indian paṇḍitas became in the middle ages. In the Durbar Library, Nepal, there is a manuscript entitled *Bodhicharyavatāraṇuśāṇa*, which is nothing else than the *Bodhicharyā* itself with a few verses added at the beginning and at the end. The prologus and the epilogue make the *Bodhicharyāvatāra* a dialogue between Aśoka and his *Guru* Upagupta.

It may be argued that *Sāntideva*, the author of *Mahāyāna* works, and *Sāntideva*, the composer of Sahajīa songs, under the name of Bhusuku may not be one and the same person. But this doubt is set at rest by the signature of one of the songs attributed to Bhusuku. The signature runs :

राउत भणइ कइ भुसुकुणइकइ सच्चनअइससहाइ ।

अइतोमूहाअइसी भान्ति पुच्छलु सइरुपाव ॥

In this signature Bhusuku calls himself a *rauṣṭ*, and we know from the palm-leaves that *Sāntideva* served as a *rauṣṭa* in Magadha.

I have a mind to say more on the subject when I publish the old Bengali songs on Buddhism. Wassiljew, following Tārānātha, thinks that there were Buddhist works in an *Apabhraṃśa* language. In our joint expedition to Nepal in 1898-99 Professor Bendall and myself got a work entitled *Subhāṣita-saṃgraha*. Professor Bendall has published the book. It contains some quotations in that *Apabhraṃśa* language. But in my last journey to Nepal in 1907 I found several works in that language which after a careful study I am inclined to call old Bengali. It is undoubtedly the language spoken in Eastern India in 7th, 8th and 9th centuries, in which these books were composed.

MISCELLANEA.

A POEM BY BHĀSA.

PANDIT T. Ganapati Śāstrī of Travancore has laid all lovers of Sanskrit literature under a deep debt of gratitude by his discovery of twelve or rather thirteen of the dramas of the almost forgotten poet Bhāsa, who is known to have preceded Kālidāsa. Three of these he has edited in the Trivandrum Sanskrit Series.

I beg to draw the attention of scholars to a *kāvya* or epic poem by the same poet. It is referred to in the *Prithvirāja-vijaya mahākāvya*, also called *Prithvi-mahendra-vijaya*. I quote from a manuscript in the possession of P. Gaurishankar H. Ojha, copied from the one in the Deccan College Library.

Text.

स्वका [सत्का] व्यसंहारविधौ खलानां वीर्या [वा]
नि बहिरपि मानसानि ।

भासस्य काव्यं खलु विष्णुधर्मोत्तो [न्तो] ध्वजना-
त्यारतवन्मुनेषु ॥

Commentary.

सतां काव्यं तद्विषये संहारविधौ राहे वीर्यारोपनेमेरपि
सकाशादुज्जनानां चित्तानि वीर्यान्वजडानि भवन्ति अत्र
साधनमात्रं लोभिरपि भासमुनेः काव्यं विष्णुधर्मोत्त-
मास्वकान् नारदहिरण्यः अत एव पारतर्क्यविशेषना
अभिहितं वस्तुन्तरवत्पारतं इत्युपपन्नो मुलान्मुस्यति भा-
सव्यासयोः काव्यविषयेस्पर्धौ कुर्वतीस्तर्कपर्यवर्तित्वेन
परीक्षकान्तरभावात् परीक्षार्थमभिधेयं तयोर्द्वयोः काव्य-
इव चित्तम् तयोर्मेधापरिमितिविष्णुधर्मोत्तमादविवेचि प्रसिद्धिः
खलैस्तु प्राप्तं सत्काव्यं वदन्ते इत्यमेवसकाशात्खलानां
राहकाव्यमित्यर्थः ।

[Leaf 1 (number 3), page 2, lines 4-11].

From this we learn that *Vishnudharma* (plural) was a *kṛṣya* of Bhāṣa and it was put in the fire for being tested. The commentator, Jonarāja (son of Bhaṭṭa Jonarāja, son of Lolarāja) who commented on the *Kirdārjunīya* and *Śrīkṛṣṇa-cherita* also, calls Bhāṣa a *muni*, and says that he and Vyāsa were rivals and one work of each was thrown into the fire, which, as a referee, did not consume the excellent work of Bhāṣa named *Vishnudharma*. It is not said whether the work of Vyāsa escaped unhurt. The submission of the works of Bhāṣa to the ordeal by fire is alluded to by Rājasekhara in Jalhana's *Sāttimuktivallī* in the verse—

भासनाटकचक्रेण च्छलेकैः सिद्धे परीक्षितम् ।
स्वप्नवासवदत्तस्य साहकोभूज पावकः ॥

where *chhalekai*¹ should be taken to mean *vidyadhai* (=critics), and where the surviving work of outstanding merit is said to be *Swapna-Vasavadatta*, and not *Vishnudharma*. The epithet *jalopamitra* (*jalana-mitra*=friend of fire) applied to Bhāṣa in *Gaudavaho* (v. 800) refers, I think, to this episode in the poet's life rather than to 'an incident in the play' (of *Swapna-Vasavadatta*), as is said by M. Sylvain Lévi. Testing the qualities of a drama or a poem by its combustibility or otherwise is indeed quaint. In his *Prabandha-kośa*, Rājasekhara-sūri alludes to the custom of authors taking their new books to Kashmir where the works were examined by Paṇḍits and placed in the hands of Bhārati or Sarasvatī, who sat on a throne. If the work was of merit, the goddess nodded in approval and flowers were showered upon the poet; if not, it was thrown to the ground.

Thus there was a tradition in the 12th century of a *kṛṣya* named *Vishnudharma* (plural) of great excellence by Bhāṣa. The fact that Bhāṣa is called *muni* and a rival of Vyāsa, and the possibility that *Vishnudharmottara*, one of the *Purāṇas* going under the authorship of Vyāsa, looks like the name-sake and counterpart of the lost *Vishnudharma* by Bhāṣa, would, no doubt, be very gratifying to Paṇḍit Gaṇapati Śāstri, who, carried away by the enthusiasm of his discovery, the importance of which he is far from me to under-rate, makes Bhāṣa anterior to Kauṭilya Chāṇakya and Pāṇini. I shall discuss his case for this assumption in another note. But those who are not prepared to accept Vyāsa and Bhāṣa as contemporaries, would admit that, in the 12th century

and thereafter, tradition remembered them as rivals of almost equal eminence and remembered a *kṛṣya* by the latter named *Vishnudharma*.

CHANDRADHAR GULERI.

Mayo College, Ajmer.

[There are two works of the name of *Vishnudharma* or *Vishnudharmottara*, of which one, according to Bühler, is as old as A. D. 500 (*ante*, Vol. XIX., p. 408). Both professing to be *Purāṇas*, one was naturally attributed to Vyāsa, who is supposed to be the author of all *Purāṇas*. As it is inconceivable that one author can compose two different works bearing one and the same name, the other *Vishnudharma* appears to have been hoisted upon Bhāṣa. A rivalry was accordingly imagined to have sprung up between him and Vyāsa, and the tradition about the ordeal of fire which originally pertained to *Swapna-Vasavadatta* was transferred to *Vishnudharma*.—D. R. B.]

ŚANKARĀCHĀRYA AND BALAVARMĀ

In a note on page 200 of this Journal for 1912, Mr. D. R. Bhandarkar has made an attempt to fix more accurately the date of Śankarāchārya. His attempt is based on the occurrence of the name Balavarmā in Śankarāchārya's commentary on the *Vedāntasūtras*, once under *Sūtra* IV. 3, 5 and once under *Sūtra* II. 4, 1. A Chālukya chief of the name of Balavarmā is mentioned in the Kadāba plates¹ of A. D. 812 as the grandfather of Vimalāditya, who was the governor of the Kunuṅgil district when the plates were issued. The period of this Balavarmā would thus be, roughly, the last quarter of the 8th century. Hitherto this was the only inscription in which the name Balavarmā was found to occur. But I have recently discovered three *śrīgals* in Hirigundāgal and Sankēhalli, Tumkur Taluk, which tell us that Balavarmarasa waged a war against the Gaṅgas during the rule of the Gaṅga king Śivamāra.² As the period of the latter is also about the close of the 8th century, there cannot be much doubt about the identity of the Balavarmarasa of the *śrīgals* with the Balavarmā of the Kadāba plates. Balavarmā's name also occurs in Maddagiri 93 and Tiptur 10, both of which³, though undated, probably belong to the close of the 8th century. As all the above inscriptions are found in the Tumkur district, there can be no doubt as to the identity of the Kunuṅgil or Kunuṅgil of the Kadāba plates with the modern Kunigal of the

¹ Chāṣka is a Pāli word meaning skilful, expert, vide Childers' Dictionary *sub voce*.—D. R. B.

² *Epi. Car.*, XII., Gubbi, 61; *Epi. Ind.*, IV., 332.

³ *Epi. Car.*, XII.

³ See *Mysore Archaeological Report* for 1910, para. 53.

same district. The Tamil inscriptions* of the Chola and Hoysala periods in Kupigal Taluk, which invariably give the name as Kupungil, also support the above identification. Consequently the identification of Kupigal with the Kōṃṭal-vishaya of the Hoasr grant of Ambēra† is no longer tenable. After the overthrow of the Chalukya power, Balavarmā may have become a feudatory of the Rāshtrakūṭas and fought on their behalf against the Gaṅgas. Several *śrugaḷa* newly discovered in Tumkur Taluk refer to the wars between the Gaṅga kings Ścipurusha and Sivamāra and the Rāshtrakūṭas,‡ one of them giving us the important information that Sivamāra fell fighting in a battle at Kāḡimogeyūr against Vallaha, i.e., the Rāshtrakūṭa king (Govinda III).

There can thus be no doubt about the existence of a prince of the name of Balavarmā at the close of the 8th century. And his period being about the same as that generally assigned to Śankarāchārya, the attempt on the part of scholars to identify him with the one alluded to by the latter in his commentary can by no means be pronounced unreasonable. On reading my *Archaeological Report* for 1910, Mahāmahōpādhyāya Haraprasada Sastri, M.A., in a kind letter dated the 1st of May 1911, wrote to me thus:—"The date of Śankarāchārya has not yet been proved by any positive fact. In your *Report* you speak of a Balavarmā in about A. D. 812, i.e., about the time when Śankarāchārya flourished; and he mentions in his *Bhāṣya* IV., 3, 4 of Balavarmā as being near to him. May not this be a positive proof of Śankarāchārya's date?" And in the note under reference Mr. D. R. Bhandarkar has likewise based his conclusions on the same identification. It is possible that the identification is correct. There are, however, a few other circumstances which cannot well be ignored in this connection. Balavarmā is not the only prince mentioned by Śankarāchārya. He mentions several others, e.g., under *Sūtra* IV., 3, 5 Jayasimha and Krishnagupta along with Balavarmā; under *Sūtra* II., 1, 17 Pūrṇavarmā. In case Balavarmā is taken to be his contemporary, it stands to reason that the others also should be treated as such. It is not reasonable to single out one of the names to base our arguments on and completely ignore the others. Identifying the Pūrṇa-

varinā of Śankarāchārya with the Western Magadha king of the same name, the late Mr. Telang came to the conclusion that Śankarāchārya flourished at about A. D. 800.⁴ With regard to the other kings mentioned above, we know of a Krishnagupta, the first king of the Gupta dynasty of Magadha, who ruled at about A. D. 560; of a Jayasimha of the Chalukya dynasty whose period is also about A. D. 500; and of another Jayasimha (Jayasimha II) among the Eastern Chalukyas, whose date is about A. D. 700. There is nothing to prevent us from identifying the kings alluded to in Śankarāchārya's commentary with those mentioned above. But none of them was his contemporary, if the date generally assigned to him is to be accepted. In these circumstances one may well be excused if one holds the opinion that the identification in the case of Balavarmā is as much open to question as in the case of the others and that the synchronism based on it is purely accidental. It looks as if one out of several names had been purposely seized upon to the exclusion of the others in order to secure support for a favourite theory. When epigraphical or other evidence becomes available to prove the contemporaneity of the kings referred to with Śankarāchārya, the argument from the synchronism of Balavarmā will be perfectly legitimate. Till then the names have perhaps to be looked upon as connoting imaginary persons like the words Dēvadatta and Yajñadatta or the letters A, B and C.

R. NARASIMHACHAR.

Bangalore.

[I have no doubt that my identification of Śankarāchārya's Balavarman is correct. For, as shown by me, his grandson Vimalāditya can alone answer to the description of the contemporary prince given by Śankarāchārya's pupil's pupil, Prajñātātman. This receives additional confirmation from the fact that it agrees with the date of the philosopher arrived at by Prof. Pathak on irrefragible evidence. It is true that Śankarāchārya speaks of other kings also, e.g., Jayasimha and Krishnagupta. But their names can have no weight so long as synchronisms of their sons or grandsons with the philosopher's pupils or pupil's pupils are not established.—D. R. B.]

* *Ibid.* Kupigal 2, 14 and 15.

† *Mysore Archaeological Report* for 1910, paras. 46 and 51-54.

⁴ *Epi. Ind.*, IV., 337.

⁵ *Ant.*, XIII 95.

BOOK-NOTICE.

THE MAHĀVAṆṢA OR THE GREAT CHRONICLE OF CEYLON. Translated into English by WILHELM GEIGER, Ph.D., Professor of Indo-Germanic Philology at Erlangen University, assisted by MADEL HAYNES BODE, Ph.D., Lecturer on Pāli at University College, London. Demy 8vo: pp. lxiv, 300; with a map of Ancient Ceylon. Published for the Pāli Text Society by Henry Frowde; London: 1912.

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J. R. A. S., 1912, p. 1110 ff.]

Professor Geiger gave us in 1908 his critical edition of the text of the Original Mahāvamsa; that is, of chapters 1 to 36 and verses 1 to 50 of chapter 37 of the whole work, being that portion which was written to rearrange, expand, and explain the Dipavamsa (see p. 11 of the introduction to the translation). He has now followed that up by his translation of the text, published in English through the co-operation of Mrs. Bode: Professor Geiger made his translation in German; Mrs. Bode turned his translation into English; and the English rendering was then revised by Professor Geiger: we may congratulate both collaborators on the result. As is well known, the text of the Dipavamsa, with an English translation, was given by Professor Oldenberg in 1879. We are now at last provided with reliable and easy means of studying both the great Ceylonese Buddhist chronicles.

[111] Professor Geiger's translation is preceded by an introduction of 63 pages, in eleven sections, in which he has discussed a variety of important points.

In the first place, he has briefly recapitulated the demonstration given in his *Dipavamsa and Mahāvamsa* (1905) that the two chronicles were based on an older work, known as the *Atthakathā-Mahāvamsa*, which must have come down originally to only the arrival of Mahendra in Ceylon (in the time of Aśoka), but was afterwards continued to the reign of Mahāsēna first half of the fourth century A.D.).

In the second place, Professor Geiger, defending the two chronicles against what he has justly described (p. 14) as "undeserved distrust and exaggerated scepticism," has shown that they are to be accepted safely as reliable historical records, with a framework of well-established dates. We have, indeed, to clear away from

them a certain amount of miraculous matter. But they do not stand alone among ancient histories in presenting such matter. And when we have made the necessary elimination, which is not difficult, there remains, easily recognizable, a residue of matter-of-fact statements, in respect of which the chronicles have already been found to be supported by external evidence to such an extent that we need not hesitate about accepting others of their assertions, which, though perhaps we cannot as yet confirm them in the same way, present nothing which is at all startling and naturally incredible.

In dealing with the chronology, Professor Geiger has accepted B.C. 483 as "the probable year" of the death of Buddha (p. 24). That particular year is undoubtedly the best result that we have attained, and that we are likely to attain unless we can make some new discovery giving us the absolute certainty which we do not possess. For a brief statement of the manner in which it is fixed, see p. 239 above: Professor Geiger has added observations of [1112] his own (pp. 26, 28-30), based on something pointed out by Mr. Wickremasinghe, endorsing it. As regards one item in the process by which it is fixed, the interval of 218 years from the death of Buddha to the anointment of Aśoka "is supported," as Professor Geiger has said (p. 25), "by the best testimony and has nothing in it to call for suspicion." As regards another item, we need not hesitate about accepting 28 years according to the two Ceylonese chronicles, against the 25 years of the Purāṇas, as the true length (in round numbers) of the reign of Bindusāra. This last consideration, we may add, entails placing the anointment of Aśoka in B.C. 265 or 264 (p. 27); if that should still remain unwelcome to anyone who, taking one item from one source and the other from another source, would place both the death and the anointment four or five years earlier, — well; it can be shown on some other occasion that there is nothing opposed to B.C. 265 or 264, for the anointment of Aśoka, in the mention of certain foreign kings in the thirteenth rock-edict. So, also, though the matter does not affect that point we may safely follow the 27 years of the two chronicles, against the 36 years of the Purāṇas, as the length (in round numbers) of the reign of Aśoka.

Professor Geiger hesitates (p. 28) to accept the "bold and seductive combination" by which I explain the mention of 256 nights in the record of Aśoka at Sahastrām, Rāpnāth, Brahmagiri, and other places. In what way, then is it to be explained? As regards the other two explanations which have been advanced, there is nothing in the calendar to account for the selection of that particular number of nights or days; and a tour of such a length by Aśoka, while reigning,—whether made by him actually as king or in the character of a wandering mendicant monk,—is out of the question. On the other hand, my explanation,—that the 256 nights mark 256 years elapsed since the death of Buddha,—is suggested exactly by the [1113] number of years established by the Dīpavamsa and the Mahāvamsa from that event to the end of Aśoka's reign, and by the well-established practice of ancient Indian kings, of abdicating in order to pass into religious retirement: see this Journal, 1911. 1091 ff. My explanation may be set aside: but it has not been shown to be open to adverse criticism as the others are.

In respect of the later Buddhist reckoning, the erroneous one, now current, which would place the death of Buddha in B.C. 544, Professor Geiger, putting Mr. Wickremasinghe's remarks in a clearer light, has shown (p. 29) that it existed in Ceylon in the middle of the eleventh century A.D. This carries it back there to more than a century before the time at which I arrived in this Journal, 1909. 333.

In § 8 of the introduction, Professor Geiger has given (p. 36) a tabulated list of the ancient kings of Ceylon, down to Mahāsēna, on the lines of the list given by me in this Journal, 1909. 359, but with some improvements. His table has the advantage of giving the references by chapter and verse to his text of the Mahāvamsa; a detail which, for reasons stated at the time, I was not able to fill in. It increases the total period according to the Mahāvamsa by 1 year, 4 months, 15 days, by alterations under Nos. 10 and 11 (plus 2 years) and No. 17 (minus 7 months, 15 days):

these are due to improved readings. And it includes two additional columns, which give the chronology in terms of the Buddhist era of B.C. 483 and of the Christian reckonings B.C. and A.D.

As regards a remark on p. 39—40, there is no need to accept the assumption that Samudragupta began to reign in A.D. 326: a more reasonable date is A.D. 335 or 340: see this Journal, 1909. 342.

The last section of the introduction (pp. 51-63) deals with the first, second, and third Buddhist Councils, all of which are shown to be historical events, and clears away the confusion in the Indian tradition between two [1114] distinct persons, Kāśāśoka and Dharmāśoka, son of Bindusāra,—the Aśoka who issued the edicts.¹

Appendix D gives a list of Pāli terms used in the translation without being turned into English. Under No. 34 there is quoted a statement that, according to the details given in a table of the end of the twelfth century, the *yōjana* works out, for Ceylon, to between 12 and 12½ miles, but that in actual practice it must have been reckoned at from 7 to 8 miles. This latter value, however, is quite an imaginary one: see this Journal, 1907. 655. And as regards early times there is no reason for discriminating between India and Ceylon in this matter; and for India we have (1) the vague day's-march *yōjana*, averaging 12 miles, but liable to vary according to the circumstances of the particular march, and, in the way of *yōjanas* of fixed unvarying lengths, (2) the long *yōjana* of 32,000 *hastā*=9 miles, and (3) the short *yōjana* of 16,000 *hastā*=4½ miles; the last being specially favoured by the Buddhists: see p. 236 above, and this Journal, 1906. 1011.

Limitation of space prevents any further remarks. I conclude by expressing the hope that some Pāli scholar will give us shortly the technical review of Professor Geiger's translation which it merits.

J. F. FLEET.

¹ There is an accidental slip on p. 60, last line but one, where Dharmāśoka is spoken of as the son of Chandragupta: read 'grandson.'

SOME PUBLISHED INSCRIPTIONS RECONSIDERED.

BY D. R. BHANDARKAR, M.A., POONA.

1.—Harsha stone inscription of Vigraharāja.

THE inscription, of which a transcript is given below, is engraved on a large slab of black stone, which lies in the porch of the temple of what is known as *puṇḍā* Mahādeva on a hill near the village Haras situated in the Sikar principality of the Sekhāvāṭī province, Jaipur State. The record was last published by Prof. Kielhorn in the *Epigraphia Indica*, Vol. II, p. 116 ff. But as he had no local knowledge of the place, he fell into some inaccuracies. Besides, many inscriptions have since been discovered, which throw a new light on some of the verses contained in this record. No excuse is, therefore, needed for re-editing it.

The record contains forty lines of writing which cover a space of about 2' 11" broad by 2' 10" high. The corners have been knocked off a little, and the right and left margins slightly damaged. A few letters have also peeled off in the body of the inscription. Still the inscription is on the whole fairly well-preserved. The characters belong to the northern class of alphabet, that was prevalent in the 10th century. Attention may be drawn in this connection to (1) the single instance of the character *ḍ* employed in *ḍāḥ-ātkeṣaiḥ* l. 2, (2) the initial *au* in *auttares(i)varaḥ* l. 22, (3) the subscript *au* in *°m=upataughaiḥ* l. 29, and (4) *po* in *lingarāpo* l. 7. The language is Sanskrit, and the inscription, excepting a few short lines in prose, is in verse to nearly the end of line 33. The remaining portion, excepting the closing benedictory verse, is in prose. In respect of orthography, it is sufficient to note (1) that *t* is throughout doubled in conjunction with a preceding *r*, except in *svarga-khaṇḍa*° l. 30; (2) the same letter is invariably doubled after a vowel in conjunction with a following *r*; (3) the sign for *r* is also used for *ḍ* except once in l. 2; (4) a single *j* is employed twice instead of *jj* in *ujalaḥ* l. 16 and *cisphura-jāṇa*°, l. 22; (5) the dental *s* is substituted for the palatal *ś*, in *auttarevaraḥ*, l. 22, and in *Chandāsiva*, l. 29; (6) the dental nasal is used instead of *anuvāda* in *dhvanā*, l. 22, and (7) in conjunction with a following letter of the dental class, in *°sannivṛṣaṇ*, l. 18 and in *°bharaṇaṇ=tathā*, l. 28; and (8) the dental *n* has wrongly been changed to the lingual *ṇ* in *prasannaḥ* l. 15, and incorrectly retained in *niruddhā*, l. 17. As regards lexicography, the following words may be noticed as being rare or unusual: (1) *niruddhaṇ*, l. 33 in the sense of 'until'; (2) *deś*, l. 38, meaning a guild (for this word see *Ep. Ind.*, Vol. I., p. 187, l. 8; and Vol. XI., p. 43; l. 3); (3) *kūṣaka*, l. 38, corresponding to the Marāṭhī word *kudā*, a measure of capacity, and (4) *heḍāvika*, l. 38, equivalent to *heḍāvuka*, as shown by Kielhorn, and signifying a horse-dealer (cf. the *Mitāksharā* on Yājñavalkya, II. 30).

Verse 1 opens with an obeisance to the god Gajānana or Gaṇeśa. The next ten verses except one are devoted to the glorification of Śiva, who was here worshipped under the name of Harshadeva. The exception is verse 9, which, we are told, was composed by one Śūra and which informs us that the hill also was called Harsha after the god. Verse 7 is important, for, if we read between the lines, it will be found to contain the information that there were two temples, dedicated to the god Harsha, one on this hill and the other down below.

Verse 12 describes what the temple where the inscription lies was like, and as Prof. Kielhorn's translation of it, owing to his lack of local knowledge, is not satisfactory, I give here mine: "Glorious is the mansion of the divine Harshadeva, which is charming with the expanse of (its) spacious hall (*maṇḍapa*), exquisite with the splendour of a gold shell, (and) lovely in consequence of (the statues of) Vikatā and the sons of Pāṇḍu set up in the row of structures along (its) sides. Resembling (in height) the peak of Meru, it is pleasant on account of an excellent arched doorway (*torāṇa-dvāra*) and well-carved bull (Nandi), and is full of manifold objects of enjoyment." All the parts of the temple referred to in this verse can be traced among its ruins on

the hill. A long flight of stairs leads to the courtyard of this temple. Just where these stairs end are the shafts of two pairs of columns one in front of the other, which were no doubt once surmounted by a *torana* and formed the arched entrance, as stated in the verse. A little further on, on a raised terrace is an old marble image of Nandi, once no doubt placed in a pavilion, of which the plinth only has survived. This is unquestionably the bull referred to in the inscription. It also says that there were other structures on the sides of the temple, and that in one of them were the images of the Pāṇḍavas and Vikatā. That there were these structures is clearly proved by the ruins of the subsidiary shrines on the south and north-west. The images of Pāṇḍavas also may be easily recognised in the ruins on the north-east. Here are six colossal images, which were originally, when whole and entire, as high as seven feet almost, and which are to this day said by the people to be those of the Pāṇḍava brothers and Draupadi. I do not know whether Vikatā stands here for the ogress Hidimbā. The figure here is, however, that of an ordinary woman, and not that of an ogress. But Hidimbā, it must be remembered, had changed herself into a beautiful woman and then married Bhīma. And the figure in question may represent Hidimbā when she had assumed this form.

Verses 13-27 celebrate a line of princes belonging to the Chāhamāna family. The first of these is:—

1 Gūvaka I., who was famous as a hero in the assembly of the sovereign Nāgāvaloka and built the temple of Harṣadeva (v. 13). The temple of Harṣadeva here alluded to is no doubt the one where the inscription stone was found, and the fact seems to be that this temple was originally constructed by Gūvaka I. and simply repaired and renovated by Allāṣa, as we shall see further on. In verse 27 Harṣadeva is said to have been the family-deity of the Chāhamāna kings, and his temple could not, therefore, have been for the first time erected by Allāṣa so late as in the reign of Vīrabharāja. The prince Nāgāvaloka, who was the overlord of Gūvaka, is, as I have shown elsewhere,¹ to be identified with Nāgabhaṭa II. of the Imperial Pratihāra dynasty. Gūvaka's son was

2 Chandrarāja (v. 14); and his son

3 Gūvaka II. (v. 14); and his son

4 Chandana, who slew in battle the Tomara prince, Rudra² (v. 14). His son was

5 Vākpatirāja, who, if I have understood verse 16 properly, at first harassed the prince Tantrapāla because he was coming haughtily towards the Ananta province with the behests of his overlord. It appears that to check the haughtiness of Tantrapāla, Vākpatirāja did not at first meet him. And Tantrapāla, with his lagged elephants, could not overtake Vākpati with his fleet horses, and so was struck with shame at not having been able to deliver his overlord's orders to him. But when Tantrapāla's haughtiness was curbed down, Vākpatirāja met him and propitiated him. This verse also, like verse 9, was, we are informed, composed by Sūra. Vākpati's son and successor was

6 Sindhharāja, who, according to verse 18, seems to have set up the gold shell (*aṇḍaka*) of the spire of the temple no doubt referred to in verse 12 above. Verse 19 states that having subdued Salavaṇa, the Tomara leader,^{3a} he captured and put to flight the princes that had gathered under his generalship. And these captured princes were kept in his prison till his overlord, who belonged to the family of Raghu, did not come to his house in person to liberate them. We have seen above that Gūvaka was a feudatory of Nāgabhaṭa II. of the Imperial Pratihāra dynasty, and these Pratihāras continued to be supreme rulers till at least A.D. 950. Hence the overlord or overlords

¹ *Ante*, Vol. XL, p. 239.

² Prof. Kielhorn takes this name to be Rudraṇa. But I think it is natural to split it into two words: (1) Rudra and (2) *ṇa*, the first as the name of the Tomara king and the second as an adjective of *bhāṣa* and thus corresponding exactly to *pramara* which precedes *ṇipa* in v. 19.

^{3a} Or it may be that he subdued the Tomara leader together with his accomplice Lavapa, as Kielhorn takes it.

of Vākpati and Śimharāja could have been no other than princes of this dynasty, which, as we know from Rājasekhara, belonged to the Raghu family. We have seen that Chandana slew a Tomara king called Rudra and now we see that Śimharāja vanquished Salavaṇa, the Tomara leader. It is difficult to say where these Tomaras had established themselves about this time. The north of the Jaipur State is divided into two great divisions, one called Tamvṛāvāṭi and the other Sekhāvāṭi. Tamvṛāvāṭi, which is to the east, is so named after the Rajput tribe Tamvar, the same as the Tomara of the inscriptions. The Tomara princes, mentioned in our epigraph, may be rulers of this province, but according to the local tradition, the Tamvars were at first ruling at Delhi, and when they were ousted from there by the Chohāns, they migrated southward and settled themselves at Pāṭan in Tamvṛāvāṭi. Śimharāja was succeeded by his son

7 Vighraharāja, reigning at the time when the inscription was composed (vs. 20-4). He made a grant of two villages, Chhatradhārā and Śaṃkarāṇaka, to the god Harshanātha (v. 25). He had a younger brother named Durlabharāja (v. 26). It will be seen from the prose portion below that besides Durlabharāja, Vighraharāja had two more brothers, Chandrarāja and Govindarāja, and that he also had an uncle, named Vatsarāja, brother of Śimharāja.

The remainder of the verse portion of the inscription gives an account of the line of ascetics who were in charge of the temple of Harshanātha. In the country of Ananta there was a devoted worshipper of Uttareśvara named Viśvarūpa, who was a teacher of the Lākula doctrine expounding *pañcārtha* (v. 28). Viśvarūpa was thus an ascetic of the Lakulīśa-Pāśupata sect. The word *pañcārtha*, which is here conjoined to the expression *Lakulāśmadya*, is a term technical to the philosophy of this sect and has been explained by Śāyaṇa in his *Sarva-darśana-saṃgraha* in the section dealing with *Lakulīśa-pāśupata-darśana*. Viśvarūpa's pupil was Praśasta, a Pāśupata (v. 29), and the latter's disciple was Bhāvirakta *alias* Allaṭa who belonged to a Brāhmana family of the Vārṇatika *khāṇḍ* (v. 30) and whose wordly (*sāṃsṛika*), as opposed to spiritual, family was at Rāṇapallikā (v. 31), correctly identified by Prof. Kielborn with Rāṇoli, 7 miles east of Haras. Verse 32 likens Allaṭa to Nandi, and from the next two verses we learn that he built the temple of Harshanātha with the wealth received from the pious people. Allaṭa's pupil was Bhāvadhyota, who with the orders of his preceptor completed the other works started but left unfinished by him probably on account of his death, such as raising an orchard for furnishing flowers to the Śiva temple, a watering place (*prapḍ*) for cattle and a well for sprinkling the orchard and filling the *prapḍ*. They were all made on the east side below the hill (vs. 36-40). He also paved the floor of the court in front of the Harsha temple (v. 42). It is worthy of note that the preceding verse uses the word *digambara* in describing him, just as verse 23 above calls Allaṭa *digamala-caṣaṇa*. Does it show that the members of the Lākula sect were naked? If they were, this would be in keeping with the fact that Lakulīśa is represented nude and called *ūrdhvacamedhara*. Verses 43-44 inform us that the temple together with the hall and the arched gateway was constructed by the *sūtradhāra* Chandaśīva, son of Virabhadra. The same thing is told in a short inscription of three lines on a piece of column in the hall immediately in front of the sanctum.

The date of the building of the temple is the 13th of the bright half of Āshāḍha of the [Vikrama] year 1013. This date has been specified to be *yathā-dṛṣṭa* or as the composer of the inscription learnt it. The sage Allaṭa is mentioned in verse 48 to have expired in the elapsed year 1027, 'when the sun had entered the sign of the Lion, on the third bright lunar day joined with the *yoga* Sabha and the *nakṣatra* Hasta, on a Monday.' This date, as calculated by Prof. Kielhorn, corresponds to Monday the 8th August, A.D. 970.

From about the close of line 33 commences the prose portion, which records the endowments of the temple of Harashadeva as they were severally received up to the 15th of the bright half of

6

[य] पंच

विश्वं देवासुराहिप्रमथमुनिवरैर्यत्समर्त्तैः सनाथम् ।
यस्येच्छा [य] किमावाहस्यपि सकलं जायते लीयते च
सोऽप्याहो हर्षदेवो भुवनविपचनासुखधरोप्रमेव ॥ [१]
मूर्तं ¹⁰वाणाभिहर्षाचिपु [रमु] परि [पु]-

7

[जाँ] तहर्षः सत्सर्व-

रिद्राद्यैर्यदृष्टैः कृतमुत्तिनतिभिः पूज्यमानोऽहं ह्येते ।
बोभूनामपि हर्षो गिरिशिखरभुवोर्भारतानुपहाव
सोऽप्याहो ¹¹लिङ्गरूपो हिशुनितनवनन्ध्रनौतिः शिवाय ॥ [७]
निर्वन्नेजा [७]-

8

¹²—०डानपुवहनरुपि शेषसंज्ञान्तसत्सर्व¹³

प्रान्तज्वालावलीड्डुनवहलमहाभूमधुजावितायम् ¹⁴ ।
संरभारंननीमस्वनमसनसरोच्छेवि यस्यासद्योके
वृद्धा देवैः सरूपं ¹⁵ किमिवसमये ¹⁶ संहतिर्भौनुवेद्य ¹⁷ ॥ [C]

9

देवः पुरधमभ्यास्ते यमर्धकपमुचके ।
हर्षकवातिः स हर्षोऽहो गिरिरेव पुनातु वः ॥ [९]
धूरस्वैरे श्लोक ¹⁸ ।

वागं नो निर्वर्त्त [रागः] प्रवहति न [शु]भा नन्दनोद्यानलक्ष्मीः
सत्रत्नस्वर्णैर्धृगामलविविध [रुपां] नैव यो —

10

[य] पाक ¹⁹ ।

अन्यां धत्ते तथापि अश्वमतिशयिनीमेष शैलीहितीयां
साक्षाच्छत्रुर्वसास्ते तदपि हि परमे कारणं रम्यतायाः ॥ [१०]
अष्टमूर्त्तिर्येनभ्यास्ते सिद्ध्यच्छकविभुः स्वयम् ।
महिमा भूधरस्यास्य परमः [को] पि-²⁰ ॥ [११]

11

²¹—स्वर्णपाण्डकांतिप्रवरत्नमहामण्डपाभीगमर्त्त
प्रांतमासाहमालाविरचितविकटापाण्डुपुचानिरामम् ।
मेरोः धृंगोपमानं सुप्रदितवृषसत्तोरणहारम्भं
नानासङ्ख्योगमुक्तं जयति भगवतो हर्षदेवस्य -

12

[स्मर्त्तम्] ²² ॥ [१२]

आद्यः श्रीमूचकास्वाप्रयितनरपतिआहमानान्वयोभू
श्रीमन्नागावलोकप्रवरनृपसमालम्बवीरप्रतिष्ठः ²³ ।
यस्य श्रीहर्षदेवे वरमवनमयी भोतली कीर्त्तिमूर्त्तै-
र्लोकैरपि स्थिरैषा प्रतपति परमैः —

13

[वराने -नेः ²⁴] ॥ [१३]

पुत्रः श्रीचंद्रराजोभवहलमयास्तस्य तीव्रप्रतापः
सूनुस्तस्याथ भूषः प्रथम इव पुनर्मूचकायवः प्रतापी ।
तस्याच्छीचंदनोद्भूतिपतिभयवस्तोनेर्यं सत्सर्वं
हत्वा रुद्रेनभूपं समर [शु]-²⁵

¹⁰ Read बापां.¹¹ Read स स्ताहो.¹² Read 'काण्डा'.¹³ Read 'सत्सर्व'.¹⁴ Read 'बहल'.¹⁵ Read स्वर्ण.¹⁶ Read किमिवसमये.¹⁷ Read 'भौनुवेद्य'.¹⁸ Read धूरस्वैव श्लोक.¹⁹ Read योग्यपदान²⁰ Supply some such word as जायते.²¹ Read भास्वस्वर्णां.²² Restore it to हर्म्भ.²³ Read 'लम्भ'.²⁴ Restore it to कि वरानेकभीमैः.²⁵ Read 'भुवि'.

- 14 ~लाद्ये ~— जयभीः²⁶ ॥ [१४]
ततः [पर] नतेजस्वी सदा समरजिस्वरः
श्रीमान्वाक्पतिराजावयो महाराजोभवत्सुतः ॥ [१५]
येनारैन्व्यं स्वसेन्यं कथमपि दधता वासिबल्गा मुमुक्षु
प्रागेव वासितेनः सरसि करिरद्विडिमौर्तु [ण्ड ?]
- 15 वन्द्यश्चानर्चुरातां समदमनिबद्धागतो नतपार्श्वे²⁷ — [जे] ।
श्मपाालस्त्रं च पालो विधि विधि गमितो श्रीविषण्णः प्रसण्णः²⁸ ॥ [१६]
शूरस्त्रेर्ष ।
लोकैर्यो हि महीतले ननु हरिश्चन्द्रोपनी गीयते
स्वामिन् [र्दे] जयेतु की ~
- 16 ~ मला²⁹ धम्मं च सस्योऽवले³⁰ ।
येनाशायि हराय मतिरकृते भक्त्या प्रभूतं वसु
श्रीमद्वाक्पतिराजसुनुरसमः श्रीसिहराजोभवत् ॥ [१७]
हेममा [री] पितं येन शिवस्य भवनोपरि ।
पूर्णचन्द्रोपमं स्वीयं मूर्तं च [च] ~— डकम्³¹ ॥ [१८]
- 17 —³² तीमरनायकं सलवर्णं सैन्याधिपरोद्धतं
सुद्धं येन मरेश्वराः प्रसिद्धिं निष्ठाशिता³³ जिष्णुवा ।
कारावेदमनि भूयश्च विष्टास्तापदि यावद्दृष्टे
समुत्सवर्षपागतो रघुकुले भूचक्रवर्ती स्वयम् ॥ [१९]
श्रीना-
- 18 —ग्रहराजो³⁴ भूतस्त्वतो वासवोपमः ।
वन्द्यश्मीर्जयभीश्च येनेते विष्टोद्धते ॥ [२०]
श्रीसिहराजोवहिता किल चित्तयती
मातेव सप्रति विभुनर्मु को ममेति ।
येनात्मवादुगले³⁵ चिरसन्निवासं
संधीरितेति³⁶ वदता निज (।)
- 19 —उत्तलश्मीः³⁷ ॥ [२१]
येन दुष्टवमनेन सर्वतः साधिताखिलमही स्ववाहनिः³⁸ ।
लीलयेव वरावर्तिनी कृता किं करीव निजपादयोस्तले ॥ [२२]
यस्य चाह चरितं सतां सदा शृण्वतां जगति कीर्तितं जनेः ।
दृष्टिजातपनरोमकं
- 20 —³⁹ ज्ञायते तनुरलं मुहूर्मुहः ॥ [२३]
मुक्ताहारैः सुतारैः प्रतरत्तुरगैश्चाहवस्त्रैश्च शस्त्रैः
कपूरैः पुगपूरैर्मलवतहवैरैर्मभारैरपारैः ।
उद्यहा [ने] समानै [थ] लकुलगिरिभिर्हन्तिवारैः सशरै-
र्जिह्वाजैः प्रातिर-
- 21 —~ निरिति भूतैः प्राभूतैर्वैः तिचेवे ॥ [२४]
उच्चधारावरमानी द्वितीयः शंकरात्मकः [१]
तनेमौ⁴⁰ हर्षना— [भ] ल्वा वत्तौ सहासनी ॥ [२५]
श्रीमत् [ह्र] भराजेन योतुजेन विभूषितः [१]
लक्ष्मणेनेव काकुत्स्थो विष्णुनेव हलायुधः ॥ [२६]

²⁶ Restore it to बलाद्येन लक्ष्म्या.²⁷ Read पार्श्वे.²⁸ Read प्रसन्न.²⁹ Restore it to कीर्तिरमला.³⁰ Read उज्ज्वल.³¹ Restore to इवाडकम्.³² Supply जित्वा or इत्या.³³ Read निष्ठाशिता.³⁴ Read श्रीमान्विषण्ण.³⁵ Read वाह.³⁶ Read संधारितेति.³⁷ Read राजवलक्ष्मीः.³⁸ Read वाह.³⁹ Read कंडका.⁴⁰ Read हर्षनाथाय.

- 22 ~—राजावली⁴⁰ चासौ संभुभक्तिमुनीदया ।
 श्रीहर्षः कुलदेवोऽस्मास्तस्माद्विभ्यः कुलकनः ॥ [२७]
 अनंतमोचरे श्रीमान् पण्डित औत्तरेस्वरः^{41a} ।
 पंचार्थलाकुलाभाये विश्वरूपो नवदुः ॥ [२८]
 ईक्षा[जा]तमलध्वन्तविस्फुरता—
- 23 ~—मेल⁴¹ ।
 प[रा]स्ताव्योभवच्छिष्यस्तस्य पाशुपतः कृती ॥ [२९]
 भाविरक्तो[भ]वत्तस्य शिष्यो दिनामतोद्धटः ।
 वार्गेदिकान्वयोद्धूतसद्विप्रकुलसंभवः ॥ [३०]
 हर्षत्वासजतो मानः प्रसिद्धो राज[पति]का ।
 सांसारिककुलाभायस्ततो यस्य विनि[र्ग]—⁴² ॥ [३१]
- 24 अद्धच्छ्रमना नेवी शिवासजस्थितिकनः ।
 श्रीहर्षाराधने नूनं स्वयं मर्त्यमवातरत् ॥ [३२]
 आज्ञन्न ब्रह्मचारी⁴³ दिगमलवसनः संयतात्मा तपस्वी
 श्रीहर्षाराधनैकध्वसनशुभमतिस्त्वक्तसंसारमोहः ।
 आसीद्यो लब्धजन्मा⁴⁴ भवत[र]पाथि[यां]—
- 25 ~—[पी] सुबन्धु⁴⁵—
 स्तेनेर धर्मविनैः सुघटितविकटं कारितं हर्षहम्भम् ॥ [३३]
 अस्मिन्ध्वंशकयैले गगनपथलिहोर्गुणगुणैः प्रमेवं
 हम्भं श्रीहर्षनामप्रयितपशुपतेः सद्धिमानोपमानम् ।
 इहा सन्नोद्युक्तं⁴⁶ बह्वसुरभवनं कारितं येन
- 26 — 47
 नासाध्यं किञ्चिदस्ति स्फुरति तपसो निःस्पृहाणां बलीनाम् ॥ [३४]
 आसीन्नैष्ठिकरूपो यो वीरपाशुपतव्रतः ।
 ती[व्र]वेगतपोजातपुण्यापुण्यमलक्षयः ॥ [३५]
 सहाशिवसमाकारस्तस्वैश्वरसमद्युतेः ।
 भावधोतोभवच्छिष्यः संदीपितशु-
- 27 — 48 ॥ [३६]
 शूरोराज्ञामयं प्राप्य प्रतिष्ठासोः शिवालभम् ।
 49 यथाप्रारब्धकार्योपानर्गीकृतमरोभवत् ॥ [३७]
 पुरस्तात्पर्वतस्याधस्तितयं येन कारितम् ।
 सत्कुपो[वा]डिका दिव्या गोमपा पटितोपलैः ॥ [३८]
 सवैव[व]हमानेन कूपेन स्वायुवारिणा [।]
 वाटिकासेव-
- 28 — — —[गो]प्रपामरपन्तथा ॥ [३९]
 [स]स्त्वैरचनं शम्भोः पयःपानं गवामपि ।
 कार्यहयमिदं सारं दर्शितं पुण्यकांक्षिणाम् ॥ [४०]
 50 दिगंबरं जडा भस्म⁵¹ तल्पं च विपुलं मही ।
 निष्ठा इतिः करः पाजं बस्वैतानि परिपहः ॥ [४१]
 शिवभवनपु—

⁴⁰ Read महाराजा. ^{41a} Read ०श्वरः. ⁴¹ Read विस्फुरज्ज्ञाननिर्मलः. ⁴² Read निर्निर्गमः. ⁴³ Read ब्रह्मचारी.
⁴⁴ Read ०लब्ध. ⁴⁵ Read सुबन्धु. ⁴⁶ Read बह. ⁴⁷ Supply भस्म. ⁴⁸ Restore it to ०गुरुकनः. ⁴⁹ Read ०प्रारब्ध.
⁵⁰ Read दिगम्बरं. ⁵¹ Originally भस्म altered to भस्म.

29

— — — रं वशासो-

सखिलमुपलेपैः पूरयित्वा यमीरम् ।
 समतलसुखसम्भ्रं प्रांगणं तेन कांते
 म[सृज]तरशिलानिः कारितं बंधयि[त्वा] ॥ [४२]
 वीरम[इ] सुतः [क्यातः] सूत्रधारोच चंडसिख ॥
 विश्वकर्म्मैव सर्वज्ञो वास्तुविद्या [म]-

30

— — — [॥] [४३]

[वि]म निर्मितमिदं मनोहरं चंकरस्व भवनं सर्वदपम् ।
 [स]र्वदेवमन्त्राहृतोरणं स्वर्गलंडनिय विधसा स्वयम् ॥ [४४]
 गंगाधरवरभवे करणिकपीठकसुतेन भक्तेन ।
 भ[क्ति]म[ते] सं सुगमा प्रशस्तिरिह धीरनामेन ॥ [४५]
 बावच्छंभी] —

31

— वनसुरनदीचंद्रलेखापवित्स्व

बावच्छंभीरुंगारेरुसि विलस[ति] द्योतते कौस्तुभं च ।
 गायत्री बाव[श]स्ति सततमुपनता प्रेक्षंती ब्र[ह्म]पोन्ते ॥
 कैलासाकारमेतत्प्रवपतु भवनं हर्षदेवस्व तावत् ॥ [४६]
 अ० -

32

०हतः शंभुः कथं कालस्य गोचरः ।
 हर्म्म्यनिर्म्माणकाल[स्तु] यथाकृटी निबध्यते ॥ [४७]
 संवत् १०९ [३] आषाढशुदि १३ शंभोः प्रासादसिद्धिः ॥ ॥ ॥
 जातिद्वानां^{४७} सहस्रे त्रिमुनवबुद्धे सिद्धराष्टी [ग]तेर्के
 शुक्ला वासी[त्]-

33

[वा]^{४८} शुभकरसहिवा [सोम]कारेण तस्याम् ।

आदिष्टः शंभुनासौ भुवममलपर्वं विष्णुना शुद्धसत्त्वं^{४९}
 लब्धा^{५०} वेदेहभावं शिवभवनमभिप्रास्थितो बालटीय ॥ ॥ [४८]
 स्वस्ति । संवत् १०३० आषाढशुदि १५ निरुद्धं बालम्बसासना[नां]^{५१}

34 चाचैव लिख्यते । महाराजाधिराजश्रीसिद्धराजः स्वभोगे तूनकूपकदावशाके सिंहगोष्ठे । तथा
 पदवद्धकविषये जैकलककेसानकूपौ । सरःकोहविषये कण्ठपादिकानिर्वं यानां [अ]तुरां ब्रांकशिखरीपरि [स्व..... म]-

35 गवते श्रीहर्षदेवाय पुण्येहनि श्रीमत्पुष्करतीर्थे स्नात्वा स्नपनार्चनविलेपनोपहारपूजशीपसर्ववाचो-
 त्तवार्थमाश्रांकतपनार्णवस्थितेर्वाचष्टासनत्वेन प्रहसौ । तपैतद्भ्राता श्रीवत्सराजः स्वभोगा[वा]म[जय]पुर] ..

36 वे^{५२} कर्मखातप्राममसाष्टासनेन । [त]था श्रीविग्रहराजेन शासनवत्प्राममद्वयमुपरिलिखित[वा]-
 स्ते । तथाश्रीसिद्धराजाल[जौ] श्रीचंद्रराजश्रीगोविन्दराजौ स्वभोगावापपदवद्धकविषये । सर्वकविष[वे]...

37 यासंख्येन^{५३} स्वहस्तांकितसास[नो] ग... [उ]के पाटकद्वये पल्लिकापानौ भक्त्या वितेरतु । श्रीसिद्धराजी-
 वतुःशास्त्रश्रीधं [धु]कः खड्गपविषये स्वमुज्ज्वलमानमद्वयप[द]मानं स्वा[स्व]नुमतः प्रवत्त[वा]न् (।.....)

38 हिला[स्मजः] श्रीजयनीराजः स्वमुज्ज्वलमानकोलिकूपकमानं भक्त्या हर्षदेवाय शासनेन हनवान् ।
 तथा समस्तश्रीमम्मह[दे]वया] शाकनद्यां लवणकूटकं प्रति विद्योपकमेकं दत्तं । तथीनरापधीयहेडाविकानां [स]...

39 बोटकं प्रति इम्म एको दत्तः । पुण्यालमिर्हानानि देवमुज्ज्वलमानक्षेत्राणि यथा । महाराजिकावां वि [०५]-
 लपालिकाविषं निम्बडिका [मा] मे^{५४} बर्मडिका [च] मरुपल्लिकायां [शा] [ट] शेषं ह [वै] लादभे [चं]
 40 ... [क] लायण [पदे] सेक्यकलेजं तथाचैव दिहलिकानं [वि] सोमके गृहदलमिति ^{५५} ॥
 स [स्वा] नेताम्भावि [नो] भूविपाला [न्तु] यो भूवी याचते रामभद्रः ।
 सामान्योयं धर्मसेतुर्नृपाणां काले काले [पा] लनीयो भव [दिः] ॥ [४९]

^{४२} Read बंधविस्वा.

^{४३} Read चंडसिखः; but this offends against the meter. The composer of the inscription obviously meant it to be read Chandraśikh.

^{४४} Read ब्रह्मपोन्ते.

^{४५} Read निबध्यते.

^{४६} Here a lotus flower is engraved.

^{४७} Read जातिद्वानां.

^{४८} Restore it to तृतीया.

^{४९} Read सत्त्वं.

^{५०} Read लब्धा.

^{५१} Read लब्ध.

^{५२} Read विषये.

^{५३} Read यथासंख्येन.

^{५४} Read निम्बडिका.

^{५५} Read गृहदलम्.

THE ADVENTURES OF THE GOD OF MADURA.

BY V. VENKATACHALLAM IYER, NELLORE.

'Men are but children of a larger growth.' The ancient priesthood of Egypt and India knew this truth quite as well as the poet Wordsworth. The priests of ancient civilisations exercised a paramount influence on the spiritual and temporal concerns of the community. They were the repositories of such learning as the period afforded. The masses were steeped in ignorance, of which superstition,—unthinking, unreasoning superstition,—is the natural offspring. It was not to the advantage of the priests to lift the veil, assuming them to have been able to do so. They trafficked in the ignorance of the people. They profited by it.

Rawlinson in his commentary on Herodotus has some pertinent remarks. "Priestcraft indeed" says he "is always odious but especially so when people are taught to believe what the priests know to be mere fable, and the remark of Cato—'It appears strange that one priest can refrain from laughing when he looks at another,' might well apply to those of Egypt." Let me add, to those of India also, for priestcraft everywhere was and is much the same.

The Indian priests wrote their fables in the form of *Purāṇas*, in the number of which the *Mahābhārata* as now extant has also to be included. They fathered their inventions on divine or semi-divine personages, the conventional creations of fancy.

Among the later contributions to the Puranic literature, the *Thiruvilayadal-Purāṇam* of Pāṇḍyanāḍ, with its counterpart, the *Halasya mādātmyam*, should be noted. It was a compilation of the *Saiva-siddhānta* period. The priests of this Order wrote the fables for the glorification ostensibly of the god Somasundara of Madura, but really of the Pāṇḍyan kings, from whose revenues the endowments of the monastic orders and of the temple were alike drawn.

I propose to give in these columns a few selections from this repertory of folk-lore. If they are not all very instructive, it is hoped they will be found to be at least amusing.

I.

Indra in the height of his pride treated his *guru* and preceptor, Brihaspati, with positive discourtesy. The latter withdrew himself from Court. By degrees, Indra found that his prosperity declined all along the line. He complained to Brahmā, the Creator, about his reverses of fortune. Brahmā said to him that it was all due to the slight he had put on the sage, his priest, and suggested to him that he should entrust the priesthood *sub pro tem* to one Viśvarūpa, son of Tvashṭā (Thot). Viśvarūpa was one of the gods and of the priestly order, that is, of the Brāhmaṇ caste; for the gods had caste among them the same as we have here below. He was, however, a partisan of the Asuras, the hereditary foes of Indra and the gods. Viśvarūpa assumed charge of the priestly office and was duly installed as the domestic chaplain of Indra. On the occasion of a ceremonial sacrifice, he so managed the rite that the omens came out favourably to the Asuras.

The cheat was discovered, and Indra promptly cut off his head. This gave rise to *Brahma-hatyā* or the sin of slaying a Brāhmaṇ, the most heinous of all sins. Indra was in great distress. He cast about for expedients to rid himself of the sin. He distributed equal portions of it among four unfortunates, the earth, water, trees and women. In the case of the earth, the sin shows itself in pits and hollows contrived to receive the refuse and rubbish of sweepings. It manifests itself on the waters as froth and foam. The trees exude it in the form of gums and resins. Women are troubled by it every month. The effect of this device was to give the transgressor only a slight reprieve, but certainly no repose.

Tvashṭā burned with rage at the murder of his priestly son. He created another for himself, Vṛitrāsura by name. The latter did not go into orders. He did better. He became king of the Asuras, as befitted one who was to avenge on Indra the murder of his brother. Vṛitrāsura or Vṛitra, as often written, proved to be the most inveterate and formidable foe of Indra. In fulness of time, however, the King of Heaven, with the help of all the greater and lesser gods, prevailed in battle and slew his enemy. But by this act he incurred, at the same time, the sin of

Brahma-hatyā over again, for Vṛitra was the son of a Brāhmaṇ god. Indra fell into a sort of dementia and wandered about, Orestes-like, pursued by his Nemesis and the relentless Furies. He had no peace of mind. He hid himself in a pool of water, for, the Furies could not pursue him into that element. They stood on the margin waiting for him to come out.

Bṛihaspati, the offended priest, was somehow appeased by Indra's forlorn queen. He was prevailed upon to go in quest of the absent god. The priest traced him to the lake. Thither he repaired. He called out to him. But Indra was afraid to come out of the water. He knew that the Furies were in waiting. Bṛihaspati, by the potency of his incantations, managed to get them out of the way. Indra was encouraged to come out and did so. The Furies, indeed, were got rid of, but not the Nemesis. Indra felt the weight of the incubus, and prayed to his priest to help him out of it.

Bṛihaspati took Indra with him from one sacred place to another, at every one of which the latter had a ceremonial bath with the spiritual ministration of the former. But the sin was not washed out of him. At last, the pilgrim, footsore and famished and little thinking of his approaching deliverance, turned his wearied steps in the direction of the future location of Madurā.

When he neared the place, he found, to his astonishment and relief, that the load of sin, with which he had been oppressed so long, dropped down suddenly from his back. He was again a free god. He proceeded apace and reached the brink of a pond, where he observed a *Śiva-līṅga* of stone. He was certain then that he stood on sanctified ground and that his deliverance was due to the grace of the Bethel that stood there, looking quite innocent.

He lost no time, but bathing in the pond, he made *pūjā* to the stone-god as well as the time and place allowed of it. Over the spot where the *Līṅga* stood Indra put up a shrine.

The god Śiva was pleased with Indra's devotion. He revealed himself to Indra and questioned him as to what he would have. The request of Indra was an humble one, that he should be allowed to stay there and worship the *Līṅga* day after day. But the All-merciful did not wish to take so much service from him. He vouchsafed to Indra that he might go back to rule his own kingdom, and that, if he worshipped the *Līṅga* on a certain day of the year, it would be accepted as equal to daily and hourly worship.

[We must take it that the shrine raised by Indra was subsequently added to by the monarchs of the Pāṇḍya dynasty and that as the result we have the great temple now standing there.]

The fable of Indra's *Brahma-hatyā* is a very old one and drawn from Sanskrit sources. The point of the tale in the Tamil *Purāṇa* is that the compiler locates the deliverance at Madurā, and ascribes it to the god worshipped there. In this the compiler was amply justified by the example of the Sanskrit Purāṇists, who connect this purgation with almost every important place of worship in India; giving rise, very frequently, to the most contradictory accounts in the body of one and the same *Purāṇa*.

The attempt to enhance the sanctity of the temple by ascribing its foundation to the god Indra appears on the surface.]

II.

There is some foundation for the belief that the original capital of the Pāṇḍya chieftains was located on the eastern coast of the Madurā District, at a place which tradition records by the name of Mañalūr. The name is suggestive. It is Tamil, and means 'the sandy town.' It would appear that, at a subsequent period, when probably the kingdom extended westwards and north, embracing the inland cantons, the necessity of shifting the capital to a central locality in order to secure the consolidation of political and administrative control occurred to the rulers.

The change in the seat of the government may be gathered from a tale recording another of the adventures of the god Somasundara. A trader of Mañalūr, in the course of his itinerant progress for custom, happened to halt at sunset at the location of the future Madurā, on a certain Monday. In the course of the night, he observed the gods, great and small, come down from the heavens and worship a *Līṅga* that stood there. He was privileged to see all this, as he was a great devotee of Śiva, himself, and strictly observed the Monday ceremonial in his practice of religion.

When he reached home, on his return from his travels, he recounted his experience to his sovereign. Just about that time, the god Siva also revealed himself to the Pāṇḍyan in the guise of a *siddha* and advised him to remove his capital to the interior, to where Madurā now stands, and build there. The Pāṇḍyan obeyed and made a start. The great Siva was pleased. It occurred to his divinity that, having chosen the site for the new capital, it behoved him to provide an adequate source of water-supply. He shook a tuft of his matted hair, in which the goddess of waters lies imprisoned. A few drops of water fell on the earth and welled out into the fountain-sources of the river Vaigai that flows past Madurā. As the water of this stream is very sweet, and the foundations of the new city were baptised with it, the capital was named Madurā. A Pāṇḍya raised a temple, we may take it, over the fane put up by Indra. He also cleared the forest all round. This Pāṇḍya was named Kulāśekhara.

[It is probable that the proximate cause of the change in the capital was, to some extent, attributable to a seismic swell on the coast, which subjected Mañalūr to the rage of the flood. So much may be inferred from the two tales which will be noticed in their proper place.

The city of Mañalūr has had the distinction of being mentioned in the *Mahābhārata*—doubtless due to the cupidity or venality of interpolators, who saw their advantage in connecting this southern Dravidian dynasty with the hero Arjuna, who is credited with having begotten on the appointed daughter of a Pāṇḍya an heir to his throne. This is to push back the antiquity of the dynasty, in popular belief, to more than 3000 B. C. The interpolation was achieved by a very slight verbal change in the text of a geographical name Mañipura into Mañalūr.]

The Virgin Queen.

Kulāśekhara Pāṇḍya was succeeded on the throne by his son and heir Malayadhvaja. His consort was the incarnation of a demi-goddess. They had no issue between them. The king performed many *āśamedhas* in hopes of getting an heir. In this he did not succeed just then. But his labours had, however, an unexpected and untoward result. Indra feared for his throne in heaven, for, it was an article of faith with him that, if any man or woman born succeeded in the accomplishment of a hundred *āśamedha* sacrifices, he would attain to divinity, sufficient at least to dispossess Indra of his throne and to put himself in the place of the former. Indra had, as usual with him, recourse to a subterfuge. He suggested to Malayadhvaja to vary the sacrifice and try the *putreshī* for the fulfilment of his desires, as the more appropriate.

The king, accordingly, started the *putreshī*. A little girl, of the age of three years, came out of the sacrificial fire. It was observed that on her bust she bore the marks of three breasts in rudiment. A voice from above, at the same time, proclaimed that, when the child should grow to marriageable age and meet with her future husband, the third breast would disappear. Malayadhvaja lived his time and went the way of his ancestors. He left no son behind him. He had crowned his only daughter before his death. This princess ruled under the regency of her mother, the dowager.

The girl-queen developed martial tendencies. Yet in her teens, she started on an ambitious project of subduing all the princes and rulers of the earth. This was easily achieved, but her ambition or love of glory was insatiable. She led a campaign against the *dikpālas* or the guardian-deities of the cardinal points. They were all vanquished, one after another, and bound down to fealty and tribute. Emboldened by these successes, the virgin queen led an expedition against the god Siva himself. She laid siege to his castle on Mount Kailāsa. The god marshalled all his clans and sent them out to fight against her, but the god's veterans were routed. More troops came out to fight and gave battle, but they were annihilated. The god was utterly discomfited. He had never met with such a disaster before. It was no use sending out even his best troops to the battle. He roused himself to action. He came out in person,—the great god Siva on the war-path. The lady gave battle. She advanced. Their eyes met. As she looked steadily at him, she observed on the left side of his person a reflection of herself, as she might in a mirror. At once, the third breast disappeared. The virgin blushed; she felt abashed as she recognised in him her future husband and the fulfilment of the prophecy. The war was indeed at an end. The god's

companions wished him joy and congratulated the lady on her conquest. The god requested her to go back to her capital, and promised that he would go there on the eighth day, being Monday, to claim her in marriage. The princess was prevailed upon to return. True to his appointment, the god appeared at Madurā, and claimed of the queen-mother the hand of her daughter in marriage.

The wedding of the divine pair came off much after the fashion among high-class mortals. The religious ministration, however, as might be expected, was of divine agency. Brahmā acted as the priest. Viṣṇu gave away the bride. All the *viśvās*, all the gods and angels witnessed the ceremony and sat down to the wedding-feast. By right of marriage the god succeeded to the throne, and reigned under the name of Somasundara-Pāṇḍya.

[During the time that the princess ruled, the kingdom obtained the name of Kannināḍu or the country of the *parthenos*. This Parthenos is the presiding deity of the ancient temple of Kanyākumārī or Cape Comorin, at the southern extremity of the Peninsula,—a Hittite-Phoenician foundation. It is probable that the Madurā temple was consecrated to the same divinity, after the settlements extended inland; and that, at first, it was the goddess alone that was worshipped there and that the association of the god-consort was a later idea. The princess, who is represented in the story as having had three breasts, is really the goddess herself, as is plain by the narration of her miraculous birth from the sacred fire. This warrior-queen is the Hittite Amazonian-goddess, the Ephesian Diana, with her many breasts, symbolising the superabundance of nature. The number, three, of the breasts in the tale is not definitive of the real number, but merely suggestive of plurality.

Doubtless it was in Madurā, as it was in other ancient countries of parallel civilization. The king was the high priest, and the queen, where she ruled, was the chief priestess. In later periods, when the spiritual chieftaincy was dissociated from the temporal, a prince of the blood royal was the priest, or the princess royal, a virgin, was the priestess. The priests and priestesses assumed the name and title of the deities to whom they ministered. In theory, the whole land was the demesne of the deity, an appanage of the temple, and the priest-king or priestess-queen was only the vice-gerent of the god or goddess.

The Dravidian Pāṇḍyans, as we find them in this early period, had progressed into the gentile organisation, but the *gens* still claimed through the female. It was a stage of social evolution, from which the neighbouring allied tribes of Malabar have not as yet emerged.

Descent and inheritance was therefore mostly in the female line, with the innovation of male descent encroaching on the old rule and creating exceptions. The dominion was ruled over by a queen. She did not cease to be a virgin, because she became a mother, any more than the goddess whom she worshipped and represented. We have the high authority of Pliny to vouch for the fact that women ruled as queens in this district. *Vide*, Christopher Cellarius in his *Commentaries*, Vol. II, in loco:—*Ab illis gens Pandas, sola Indorum regnata feminis. Unam Herculis sexus ejus genitam ferunt, ob idque gratiorem præcipuo regno donatam.*

A similar custom in dynastic Egypt is spoken about by Maspero, in his *Struggle of the Nations*, in a passage, which may be cited with advantage here.—“From the 12th dynasty downwards, the part played by princesses increased gradually and threatened to eclipse the power of the princes. Perhaps it was due to the males being killed out in the continuous wars. The history is obscure. When it becomes clearer, we find quite as many ruling queens as kings. Sons took precedence of daughters, when they were the issue of a brother and sister along with their full-blooded sisters. But the sons lost this privilege when there was any inferiority in origin on the mother's side, and their chances diminished in proportion to the remoteness of the mother from the line of Ra. In the latter case, all their sisters born of marriages, which to us appear incestuous, took precedence of them and the eldest daughter became the legitimate Pharaoh, who sat in the throne of Horus on the death of her father and even occasionally during his life-time. The prince whom she married governed for her, offered worship to the gods, commanded the army and administered justice. At her death, her children inherited the crown.”

The princess in the tale is to be understood as representing a class, a succession of sovereigns like herself, in some sort of continuity. Where the annals of a whole period have been lost to tradition, a device of the ancient writers was to embody the history of the entire period in the individuality of one monarch, whose life they prolonged even to a millennium, as occasion required. Witness the instance of a thousand years of universal oppression by generations of Assyrian monarchs, impersonated in the Semitic Zohak of Pehlevi tradition and of the *Shāh-nāma*.

It appears in the *Purāṇa* that, subsequent to the time of this princess, succession went in the male line in unbroken continuity. This marks the change in the social organisation, by which the succession to property was finally transferred from the female line to the male. The princess, then, was the eponymous heroine of a whole line of queens of the earlier period. Were it otherwise, it is difficult to believe that a solitary instance, or an exceptional one, should have been effective in giving a historical and suggestive name to the kingdom to endure for future generations.

The god acquires the right to rule in virtue of his marriage, as was customary in ancient Egypt, Lycia, Caria, Lydia and neighbouring countries in matriarchal epochs. The attempt to deduce a divine origin for the founders of the dynasty is thus apparent.

The prominence given to that day of the week which is Monday is evidently referable to the cult of the Moon, a cult which had its origin when the Moon was the year-god of time measurement. When, in a later era, the Sun, having been liberated from his subservience to the Star-gods who commanded the year-reckonings, was allowed undisturbed sway in marking time, the cult of the Moon was transferred in its entirety to him and he ruled thereafter as Somanātha, or the lord of the Moon, and, as a consequence, of the Moon-goddesses. The Monday cult, however, having been firmly established in practice, survived into the later epoch, though in association with the new god.]

III.

The wedding-feast.

The table-provisions had been prepared for the Marriage feast on such an extensive scale that hardly any appreciable quantity was diminished by the efforts of Siva's retainers. The hostess, the mother of the bride, was disagreeably surprised and felt very sorry that so much should go to waste. When she made mention of this to her son-in-law, he thought he would play a practical joke. He happily recollected that his retainer, Kundotharan, had not been at the dinner. He now suggested that this faithful servant of his should be fed. At the same time, he exercised his divine will that the all-consuming fire of the ocean, the *aurva*, should get into the stomach of this yokel. He started eating and finished up with a mass of food of the cubic magnitude of the Himālayas, and yet, complaining of famine and hunger, implored, with the simplicity of the unfortunate Oliver Twist, for more. But all the available store had been exhausted, and the hostess acknowledged herself beaten. The god then took it on himself to feed his retainer and doubtless, succeeded. At the end of the banquet, Kundotharan felt very thirsty. He helped himself to all the water available in Madurā. But his thirst was in no way allayed. Then the god requested the Ganges on his head to spare some drops of her store. She did so and the great river of Vaigai at once wound her course past the walls of the city. Kundotharan drank his fill of the ceaseless stream and was so good as to announce that his thirst was now quenched.

The summoning of the seven oceans.

When the god ruled at Madurā under the name of Somsundara Pāṇḍya, the queen-mother, desired to bathe in the ocean. For, the *rishi* Gantama had advised her that a bath in the waters of the ocean would free her from future births. This efficacy was due to the circumstance that all the sacred rivers flow into the sea, and the waters of the ocean are, therefore, impregnated with the combined purifying essence of all the holy rivers.

The old lady preferred her request to her divine son-in-law through her daughter that she might be enabled to take the bath as advised. The god-king suggested that there was no need for her to travel out of Madurā to have her wish. If she had no objection, he would procure for her the waters of all the seven oceans at Madurā itself. So there was a tank or pond contrived, the water for which, in obedience to the god's commandment, came bubbling up from the deep-sea fountains of the seven oceans.

When the lady went out for her bath in the tank, an unexpected difficulty was interposed by the Brāhmaṇa priests. They ruled that, according to the law of the *Śāstras*, the ocean bath had to be gone through by a woman in this wise. She should make the plunge holding her husband by the hand, or in default of the husband (that is in the case of a widow), her son, and in default of both, holding on to the tail of a cow. Unfortunately, the lady had neither a husband nor a son. So to satisfy the canon, she would have to adopt the third course. She felt it a great humiliation to be driven to do that. Was it for her, the living head of this ancient house to submit to this indignity? Was there no help against the rigour of the law?

The divine son-in-law, however, came to the rescue. He willed that the departed partner of the royal relict should come down from his place in Heaven. Forthwith, Malayadhvaja came down from *Śvarga*. The spouses bathed in the tank with all due ceremonial observance. As soon as the bath was over and the parties put on dry clothes, a litter came down from the heavens, and Malayadhvaja with his queen flew up in it to Sivaloka, within sight of the wondering populace.

[This tank, I believe, is the temple tank, in the waters of which experts in bacteriology will find enough to engage their attention and to test their learning. The tale was invented for the sanctification of the tank, where pilgrims bathe as a religious observance, to the present advantage of the priests, who receive a fee at each bath.]

The attention of the reader is drawn to the incident, as narrated here, that brought the river Vaigai into existence. It is a second version of the subject, and quite contradictory of the one that has preceded it in the second tale, where, the god, acting as the health-officer of the newly-founded capital, calls the river into existence for the due water-supply of the new settlers.]

IV.

The goddess-queen yearned for issue; the god-king understood this and willed that the *Devar Fila*, Kumāra, should be born in flesh and blood as their son. The queen soon found herself *ensiente* and in due course gave birth to a son, on a very auspicious day, a Monday in conjunction with the star *Ārdra*. All the goddesses assisted at the accouchement and the gods at the naming. The infant was named Ugra-Pāṇḍya. Brihaspati taught him the *Vedas* and the divine father himself initiated him into the secrets of the *Pāsupataśāstra*. The boy attained the age of sixteen and his marriage was contemplated. It was arranged that he should marry the daughter of the king of north Mañalūr, of the Chola dynasty and of the solar race. The Pāṇḍyas were of the lunar race.

The father bestowed on his son three potent arms: *vāl*, *valai* and *vendu*, divine weapons of offence which no one less a personage than the son god could wield. The prince was crowned king as soon as he attained majority, by his parents, who entered the temple, and, becoming unified with the god and the goddess thereon, disappeared from mortal vision.

Ugra-Pāṇḍya performed many *āśvamedha-yagas*. Indra feared for his safety. He set up Varuṇa, or Poseidon, to invade the kingdom of the Pāṇḍyan and submerge the same with his waters. The briny deep at once fretted and foamed, swelled and surged. The flood rose so high and coursed so far inland that the waves dashed against the walls of Madurā. The young king was told in a dream by his father, the god, to use the *vāl* he had given him against the attacks of Poseidon. It was a sort of javelin. The king followed the direction given, with the result that the Ocean god recoiled, shrank back to his original dimensions and lay prostrate at the feet of the youthful sovereign.

Indra, having been baffled in this attempt, changed his tactics. He withheld rain from the three kingdoms of the Tamil country, Chera, Chola and Pāṇḍya.

The three kings took counsel together, and questioned the sage Agastya as to how it happened that there was continued drought in the land. The *Rishi* gave very little of comfort; he said the same conditions would continue for a period of twelve years, unless they saw their way to make peace with Indra. But this was easier said than done. Where, when and how should they meet Indra for a conference? The *Rishi* advised them that, if they duly performed the Monday *vrata* or rite, they would be enabled to go up in the flesh to *Indraloka*. They went through the *vrata*, accordingly, and like angels they soared into the empyrean and higher above that into *Indraloka*. Indra received them in full court. High seats were placed for them, and Indra requested them to be seated. Chera and Chola responded, but the Pāṇḍya, with a dash of audacity, which took his brother kings by surprise, seated himself on the throne of Indra by the side of its divine occupant. Indra was greatly nettled, but kept his temper admirably. Chera and Chola begged of Indra to send down rain for their domains. He promised to do so. The Pāṇḍya did not deign to make the request; he would get from Indra by force, if necessary, what he wanted. Chera and Chola were dismissed with costly presents. One was fetched for the Pāṇḍya also. It was a pearl necklace, but so heavy that a multitude of angels was required to bring it to the presence. Indra offered it to the Pāṇḍya, and requested him to wear it, with the idea of seeing him humbled: for, Indra supposed that the Pāṇḍya could not even move it, much less take it up by the hand. But the Pāṇḍya took it up as lightly as if it were a goose-quill, and wore it round his neck. Indra was beaten at his own trick, and felt, as may be surmised, somewhat ill at ease. The king of the gods took his leave of the king of men.

The interview certainly failed to promote a good understanding. Indra still withheld rain from the country of the Pāṇḍya, though he fulfilled the promise he had given to Chera and Chola. The king was thrown into a rage. He would have his revenge on Indra. He sent into prison, on a charge of espionage, some clouds that had inadvertently lighted on a hill in Pāṇḍyanāḍ. This was throwing down the gauntlet for Indra to pick up if he dared. These clouds were among the faithful vassals of Indra. They had been out picnicking on a holiday in the neighbourhood of Madurā, on the Pasumalai hills, and had no passports to exhibit. War proved inevitable. Indra came down to fight the Pāṇḍya. The battle raged fiercely and long. The Pāṇḍya had to face the *vajrayuṣha*, that is, the thunderbolt of Indra.

The Pāṇḍya launched the *calai*, the bangle that his father had given him, at the king of the gods. It sped like lightning. The thunderbolt of Indra was knocked down from his right hand and his jewelled crown from his head. Indra got his deserts; he felt, as others have done after him, that discretion was the better part of valour. He turned his back and fled in indecent haste. We are not told, but we may take it that, before he left the field, Indra managed to pick up his thunderbolt, for he is known to have used it again in battle and with better effect against the Asuras.

After some time, Indra feared that the Pāṇḍya would carry the war into *Indraloka*. He was advised to sue for peace. The Pāṇḍya was to some extent conciliated as the overtures came from Indra. It was agreed between the high contracting parties that the imprisoned clouds should be set at large and that Indra should send down rain on Pāṇḍyanāḍ.

But the Pāṇḍya had no confidence in the word of Indra, or in his fidelity to an oath. Sureties were required. A certain man of the Vellala caste, who was a personal friend of Indra, stood security for his good behaviour, and peace was concluded. Rain fell and the famine was at an end.

[The king and the queen being the *avatāras* of the god Siva and his divine consort, it was only natural and necessary that the son of their begetting should be the double of Kumāra, the son-god.

The three potent arms which the divine father vouchsafed to the divine son are the usual outfit of solar heroes, the symbolism of which might vary, but is easily understood, as pointing to the same equation, as in the case of Bellerophon, Perseus, Sigurd, Karna of the *Mahābhārata* and other solar protagonists.

The *vel* is a kind of javelin, the ashen spear which Cheiron gave to Pelens: the *caduceus* passed on by Hermes to Apollo. The *salai*, which signifies the bangle, is the perimeter of the solar orb, the discus, the *chakra* named *sudarśana* in the hands of Viṣṇu. The *sendu* or ball is the orb itself, the burning globe. These are the weapons with which the son god, that is the infant sun-god, Horus, fights his enemies in the heavens.

The mention of north Mañalūr, which cannot now be located, any more than the south Mañalūr, as the seat of the Chola dynasty, points to simultaneous settlements by cognate tribes, to the north and the south on the sea-coast. The portion of the fable recording the adventures of the prince in the *Indraloka* is quite devoid of any interest. It embodies no history and no moral. The prince's hauteur at the reception by Indra and his ultimate triumph over the latter is, perhaps, for a mortal prince, a trifle over-done, but is quite intelligible as the allegory of a solar myth.

The invasion of the district by the waters of the deep very probably records a reminiscence of the circumstances which made it desirable to shift the capital from the coast to the interior. This has been shown already.

The compliment paid to the Vellala caste, in that an individual of that section is made to stand surety for the due observance by Indra of his pledges, is probably due to the fact that the ruling chiefs were of this caste, the members of which therefore ranked high as kinsmen of the monarch, and in early times certainly supplied the military element of the body politic].

THE ADITYAS.

BY B. SHAMASASTRY, B.A., M.R.A.S., BANGALORE.

(Continued from p. 41.)

"Very red are the garments; the Viśvêdêvas throw (such weapons as) Aṣṭi, the thunderbolt, and the hundred-killer, and swallow things with fiery tongues; (the season seems to say) 'no god, no man, no king Varuṇa, the lord, no Agni, no Indra, and not even Pavamāna is like myself; there is none like me.' One end of the heavenly bow (the rainbow) is attached to the sky, and the other to the earth. Indra, in the form of a white ant, cut off the string of this bow. This stringless bow they call the bow of Indra in the colours of the clouds; the same is also called the bow of Samyu, the son of Bṛihaspati; the same they call the bow of Rudra; one end of this bow cut off the head of Rudra himself; that head became what is called Pravargya. Hence, whoever performs the Pravargya rite reinserts the head of Rudra. Then Rudra will not molest him who knows thus."—

The mention of a white ant seems to refer to the supposed connection of the rainbow with an ant-hill, as Kālidāsa says in his *Māghadūta*:—"The rainbow rises from an ant-hill."¹⁹ As the word Rudra means the Number 11, there may be some reference to the last 12 days of the sidereal year, and it is likely that the excess of $\frac{1}{4}$ ths of a day in those 12 days may represent the head of Rudra. This excess, which, as we have already seen, is the cause of the break in the eighth intercalary month, seems to have been described as having been cut off by the rainbow. The Pravargya ceremony which is usually performed in the Sôma sacrifice is a rite which comes after the Sôma plant is purchased in the thirteenth month.²⁰ Evidently, then, the Pravargya rite seems to symbolise the break in the eighth thirteenth month. The poet continues to speak of the characteristics of the winter and the winter solstice:—

असूयार्तिऽतिरूपान् शिशिरः प्रहृष्यते ।
 नैव कपं न वासांसि न ऋतुः प्रतिहृष्यते ॥
 अन्धोन्म्यं नु न हिम्रातः सतस्त्वहेवलक्षणम् ।
 लोहितोऽक्षिणं चारक्षीर्षिं सूर्येऽन्धोऽहम् प्रति ॥
 स्वं करोषि न्यञ्जलिकां त्वं करोषि निजानुकां ।
 निजानुका न्यञ्जलिका भमी वाचस्पतिसत्तामिति ॥ 29
 तस्मै सर्वं कृतयो नमते नवांशकरत्नाम् ।
 प्रपुरीषां ब्राह्मणं अन्वोति न एवं वेद ॥ 30
 स खलु संवत्सर एतैस्तेनानीनिस्तद्व
 ईशाव सर्वान्कामननिवर्तति ।

¹⁹ *Māghadūta*, I. 15

²⁰ See *Āitareya Brāhmana*, I. 12.

"(Man) has his eyes raised up; he moves neither forward nor backward, for winter is seen; neither colour nor garments for the winter; the eye of the winter is not seen; people do not kill each other (*in battle*); this is the sign of the winter; the eyes (*of people*) will be red, and their head gray; observing the northern movement of the sun, you spread and raise the joined palm, of your hands and you bend your knees (*as a mark of respect to the sun*). May men use this expression: 'Bended knees, and spreading and raising the joined palms of the hands.' To the sun all the seasons bow, for he is the maker of the (*two*) goals. The Brāhman who knows thus obtains priestly functions to perform. This intercalated year with these troops (*the intercalary months*) brings all desired offerings to Indra."

The goals referred to in the above passage seem to be the two solstices, between which the usual six months, together with the $7\frac{1}{2}$ intercalary months, seem to have been counted and observed. Since Indra is the god of the last intercalary month, the year having such a month is said to bring all offerings to Indra in the sacrifices for which learned Brāhmanas were invited.

The poet now goes on to speak of the cycle of 100 years:—

स द्रप्सः । तस्वेषा भवति । अवद्रप्सोऽ शुभतीतिष्ठत् । इवान् कृष्णो वयमिस्वहवैः । प्रावर्तमिद्रप्सश्चा धर्मतः ।
उपस्तुहि तं नृम्यामयद्रानिति । एतदेवैन्द्रः सालावृक्षा सह अद्रुपान्मरिद्रुदधति । पृथिव्यं शुभती सप्तम्ववस्थितस्ते
पत्सरः सिधं च । नैव विद्रुषा आचार्योतिवासिनो अन्योन्यस्मे दुष्माताह । यो दुष्माति भदयते स्वर्गादीकाह इहृत्तमं-
इलानि । सूर्यमंडलान्यावद्यायिकाः अतः कृष्णं सनिर्वचनाः ।

"It is a drop (*of time*); about it the following is said:—'The drop (*of time*) obtained its firm footing on the shining thing (*Amśumatī*), coming as a dark thing with ten thousand (*days*)' 'O Drop, thou art Indra, coming frequently; with all thy force, melt the surrounding clouds which are praised by men and which can pour water. With the same rain-bringing clouds, Indra slays the Asuras (*of the intercalary months*). The earth is called the shining thing (*Amśumatī*). The year having the intercalary month has obtained its firm footing on her, and also in heaven. The teacher and disciple who know this should not hate each other. Whoever hates so will fall down from the heavens. Thus are explained the circles of the seasons. Next the circles of the suns [*the gods of the intercalary months*] together with the stories and explanations."

The word *drapsa*, 'drop,' seems to be a name of one hundred years, since it is described as coming with 10,000 (*days*). We know that the last cycle of five years in every period of 20 years consists of 2,000 days. Accordingly there will be $5 \times 2000 = 10,000$ days in the five cycles occurring in $20 \times 5 = 100$ years.

While describing the same *drapsa*, the Atharvavēda (XVIII, 18, 28, 29) calls it 'hundred-streamed,' to which no other meaning than one hundred years can possibly be attached. The verses run as follows:—

द्रप्सश्चस्कंद पृथिवीमनुद्यामिर्न च योनिमु यदच पूर्वः ।
समानं योनिमुत्संघरतं द्रप्सं सुहोम्यनुसप्त होवाः ॥ 28
सतधारं बाहुमकं स्वविहं नृषक्षसस्ते अभि चक्षते रयिम् ।
ये पुनरिति प्रच यच्छति सर्वेषां ते दुहते इतिष्ठां सप्तमातरम् ॥ 29

"The Drop leaped toward the earth, the sky, toward both the source, and the one that was of old. To the drop that goes about toward the same source, do I make oblations after the seven priests.

"A hundred-streamed Vāyu (wind), a heaven-finding sun, do those men-beholders look upon; whose bestow and present always, they milk a sacrificial gift having seven mothers."

It is to be noted how the author of the Āraṇyaka connects the 'drop' with Indra, the god of the seventh intercalary month, and ten thousand days, while the Atharvavēda combines it with seven priests and mothers (*i. e.*, seven intercalary months) and one hundred streams (*i. e.*, years). Now let us revert to the poet of the Āraṇyaka and hear what he says about the seven suns:—

अरीगो आजः पटरः पतंगः स्वर्णरो ज्योतिष्मान्निभासः ।
ते अस्मे सर्वे विवशापतति ऊर्जे दुहाना अनपस्करतं इति ॥
कदम्बपोऽध्वनः स महामेकं न जहाति ।
तस्वेषा भवति:—
यत्ने शिल्पं कदम्ब रोचनावत् इन्द्रिवावत् पुष्कलं चित्रनाम् ।
यस्मिन्सर्वो भविताः सप्त साकम् ॥

"Arôga (one without disease), Bhrâja (shining), Paṭara (one covered with clouds), Pataṅga (flying), Svarṇara (golden), Jyôtiṣmân (one with mass of light), and Vibhâsa (one with splendour),—these illumine the heavens for him, milking strength (for the sacrificer) and never losing their splendour. Kaśyapa is the eighth; he never leaves the mountain called the great Mēru. The following is said of him :—

* What contrivance of thine, O Kaśyapa, is that which is full of shining, vigorous, splendid, and of wondrous light, and in which the seven suns are set together.'—"

तस्मिन्नाजानमविभ्रमेनानिति । ते अस्मै सर्वे कश्चपाङ्गवोविलेनन्ति । तान्तीनः कश्चपाङ्गविनिर्भवति भस्माकर्णकृषिवम् ।

"In him (Kaśyapa) may we seek a king; they all (the suns) obtain light from him; the moon blows them out from Kaśyapa, just as a goldsmith blowing his bellows (over the fire with gold)."

प्राणो जीवानि इन्द्रियजीवानि । सप्त क्षीर्पणाः प्राणाः सूर्यो इत्याचार्याः ।

अपश्यन्महेतत्सप्तसूर्यानि पञ्चकर्णो वात्स्यायनः सप्तकर्णश्च ब्राह्मिः ॥

"(The seven suns are) the vital breaths; they are the forces of life; they are the principles of the vital organs; the seven vital breaths in the head are the suns,—so say the Teachers; Pāñcharka, the son of Vātsyāyana says :

* I have seen the seven suns; ' so also Saptakarṇa, the son of Plākṣhi.' "

आनुभूयिक एव नौ कश्चप इति उभौ वेदयिते । न हि शेकुनिव महानेर्न गंतुम् ।

अपश्यन्महेतत्सूर्यमंडलं परिवर्तमानं गार्ग्यः प्राणपातः । गच्छतं महानिहम् ।

एकं पाञ्चरतम् ।

"We have only heard of Kaśyapa; thus both of them tell each other; we cannot go to the great Mēru. Gārgya Prāṇatrāta says: 'I have seen the circle of the (seven) suns which are moving around; go to the great Mēru and also to the one (sun) who never leaves it.'—"

आजपरपतंगा निहने तिष्ठजातपति । तस्यादिह तन्वितयाः ।

अमुचेतरे तस्यादिहातन्वितयाः । तेषामेवा भवति.

सप्त सूर्या विवममुप्रदिष्टाः तानन्वेति पदिनिर्हसितावाह ।

ते अस्मै सर्वे घृतनातपति ऊर्जे पुहाना भवपस्फुरतः इति ॥

"Bhrâja, Paṭara, and Pataṅga shine, standing below; hence they are productive of heat to this world; the others are in the upper world; hence they are not productive of heat to this world; of them, the following is said:—"

"The seven suns have entered into the heavenly world; whoever has paid sacrificial fees will follow them; they all illumine the *gât* for him, milking strength and causing no heat."

सप्तर्षिजसूर्या इत्याचार्याः । तेषामेवा भवति । सप्तर्षिषो नानासूर्याः सप्त होतारः कश्चिजः । देवा आवित्वा ये सप्त तेनिस्सोनाभिरस्यन् इति.

"—'The seven sacrificial priests are the suns,'—so say the Teachers; of them, the following is said: 'The seven regions with many suns, the seven Hôtri Priests, and the shining Âdityas who are also seven; by means of them the moon is maintained [i. e., the lunar year is prevented from rotating further]."

तस्याम्नायः । दिग्भाजः कस्तुन्कपोति । एतवेवाहृता आसहजसूर्यताया इति देशपायनः । तस्येवा भवति.

"—Accordingly there is the saying: (the sun called) Digbhrâja (illuminator of the regions) makes the seasons; in this way the suns are multiplied up to a thousand,'—so says Vaisampāyana. About this, the following is said:—"

यद्याप इन्द्र ते शतं शतं भूमीः उत स्रुः । तस्या वजिन् सहस्र सूर्या अनु न जातमहं रोहसी इति । नानालि-
गत्वाहृता नानासूर्यस्यम् । अहो तु ध्ववसिता इति ॥

"O Indra, if the number of both heaven and earth comes to a hundred, even then, O Wielder of the thunderbolt, no thousand suns will follow thee, born as thou art between those two worlds. Since the seasons are of different signs, the suns are many; but it is settled that they are eight."

What are called heaven and earth in this and other passages seem to be the two limits between which the seven intercalary months are inserted. Accordingly we may take those words to signify the cycle of 20 years. Hence a hundred of both heaven and earth will mean a 100 cycles of 20 years each, containing $100 + 7 = 700$ or $100 \times 7\frac{1}{2} = 750$ suns or intercalary months, with Indra as their god, but not a thousand suns. This seems to be the meaning of the poet when he says that, though the number of the birth-places of Indra amounts to a hundred, no thousand suns will follow him. After speaking of various things, especially of Vishnu, of Kaśyapa, of seven Agnis who appear to be the same seven suns, of Gandharvas, and of seven Vāyus, the poet, says:—

सहस्रवृद्धिं भूमिः परं द्यौम सहस्रवृत्.

"This earth contains a thousand, and the distant heaven also contains a thousand."

If the explanation I have given above of the seven Ādityas and of the number one thousand, is true, it follows that the two worlds, each containing a thousand (*days*), as described in the above passage, must mean the two wings or halves of the last cycle of five years in each period of 20 years.

After speaking of sundry things which it is unnecessary to notice here, the poet goes on to say:—

अदितिर्जातमदितिर्जानित्वम् । अतो पुत्रास्तो अदितेर्देवैर्जातास्तन्वः परि । देवानुपमैस्सप्तभिः परा माता-
ब्रमास्वत् ॥ सप्तभिः पुत्रैरादितिः उपमैस्तूयैर्ब्रुवन् । प्रजायै नृस्यवे तत्परा मातादिमानरदिति ॥

ताननुकल्पिष्याम-निबद्धं वक्ष्ये च धाता चार्धमा च अंशद्वयं भगद्वयं इन्द्रद्वयं विवस्ताद्वयेत्येते.

"Aditi is past and Aditi is future; of the eight suns of Aditi, who were born from her body, she approached the gods with seven and cast out Mārtaṇḍa; with seven sons Aditi approached the gods in the former Yuga (cycle of 20 years); she brought thither Mārtaṇḍa again for birth and death. We enumerate them: Mitra and Varuṇa, Dhātā and Aryamān, Amśa and Bhaga and Indra and Vivasvān,—these are they."

After referring to the verses which describe Puruṣa, the poet concludes by saying:—

गर्भः प्राजापत्यः । अथ पुरुषस्तप्तपुरुषः ।

"The seed belongs to Prajāpati, Father Time; and the Puruṣa (*born thereof*) is sevenfold."

The *Satapatha Brāhmaṇa* identifies the seven Puruṣas with the seven logs and tongues of Agni, and also with Indra. The passages in which this identification is made are thus translated by Prof. Eggeling:—

"He offers with Vag. S. XVII. 79, 'thine, O Agni, are seven logs,'—logs mean vital airs, for the vital airs do kindle him;—'seven tongues,'—this he says with regard to those seven persons which they made into one person;—'Seven Rishis,'—for seven Rishis they indeed were;—'seven beloved seats,'—this he says with regard to the metres;—'sevenfold the seven priests worship thee,'—for in sevenfold way the seven priests indeed worship him;—'the seven homes,'—he thereby means the seven layers of the altar; 'seven,' he says each time,—of seven layers the fire-altar consists, and of seven seasons the year, and Agni is the year."²¹

"This same vital air in the midst doubtless is Indra. He, by his power, kindled those other vital airs from the midst; and in as much as he kindled, he is the kindler (Indha): the kindler indeed,—him they call 'Indra' mystically (esoterically), for the gods love the mystic. They (the vital airs) being kindled, seven separate persons (Puruṣa)²²."

I presume that I have made it clear that the various expressions, such as the eight sons of Aditi, the seven or eight Ādityas, seven eagles or swans, seven butters, seven logs of fire, seven tongues of Agni, seven Vāyus, seven cattle, seven breaths, seven Agnis, seven Puruṣas, seven horses, seven sisters, seven priests, seven seers, and seven and a half embryos, are all of the same meaning, viz., the seven and a half intercalary months occurring in the cycle of twenty luni-sidereal years, and that the act of getting rid of the intercalary months is described as a recurring conflict between Vṛitra, the demon of the intercalary months, and Indra, the god of the seventh intercalary month. That this conflict was a periodic and recurring phenomenon, is so well known to all Vedic scholars that it needs no proof. The expression that Indra killed Vṛitra three times, securing thereby three *akṛthyas* or 'fifteens,' evidently signifies the cycle of sixty years, which consists of three cycles of 20 years each or twelve cycles of 5 years each. Since Indra is said to be the slayer.

²¹ Sat. Bra. IX. 2, 3, 44-45.

²² Ibid. VI. 1, 1, 2.

of Vṛitra, Sambara, Bala and other demons, it is clear that those demons represent the same evil nature or side of the same intercalary months. The expression that Indra found out Sambara and killed him in the fortieth year (*R. V. II. 12, 11*) proves the same fact. We are also told in the *Rigvéda* (I. 130, 7; IV. 30, 20) that the number of Vṛitra's forts which Indra destroyed amounted to one hundred. If this can be taken to mean a hundred times repetition of the cycle of 20 years, then we have the chronology of the Vedic period to be $20 \times 100 = 2000$ years.

The *Śatapatha Brāhmaṇa*, on the other hand, makes the number of the repetition of the seven intercalary months to be 101. The following is the translation by Prof. Eggeling of the passages in which this idea is conveyed:—

"Sevenfold, indeed, Prajāpati was created in the beginning. He went on constructing (developing) his body, and stopped at the one hundred and onefold one. He who constructs one lower than a sevenfold one cuts this Father Prajāpati in twain: he will be the worse for sacrificing as one would be by doing injury to his better. And he who constructs one exceeding the one-hundred-and-one-fold one steps beyond this Universe, for Prajāpati is this Universe. Hence he should construct the sevenfold (altar), then the next higher up to the one-hundred-and-one-fold one, but he should not construct one exceeding the one-hundred-and-one-fold one, and thus, indeed, he neither cuts this Father Prajāpati in twain, nor does he step beyond this Universe."²²

"Prajāpati, indeed, is the year, and Agni is all objects of desire. This Prajāpati, the year, desired, 'May I build up for myself a body so as to contain Agni, all objects of desire.' He constructed a body one-hundred-and-one-fold."²⁴

"Now this year is the same as yonder sun; and he is this one-hundred-and-one-fold (Agni);—his rays are a hundredfold and he himself who shines yonder, being the one hundred and first, is firmly established in this Universe."²⁵

"And, indeed, the one-hundred-and-one-fold passes into (becomes equal to) the seven-fold one; for yonder sun, whilst composed a hundred-and-one-fold, is established in the seven worlds of the gods, the four quarters and these three worlds; these are the seven worlds of the gods, and in them the sun is established."²⁶

"And, again, as to how the one-hundred-and-one-fold (altar) passes into the seven-fold one: Yonder sun, composed of a hundred and one parts, is established in the seven seasons, in the seven stomas, in the seven Prishtha-sāmāns, in the seven metres, in the seven vital airs, and in the seven regions."²⁷

"Therefore, also, they lay down around (the altar) sets of seven (bricks) each time, and hence the one-hundred-and-one-fold passes into the seven-fold one; and, indeed, the seven-fold one passes into the one-hundred-and-one-fold."²⁸

"And thus, indeed, the seven-fold (altar) passes into the one hundred and one-fold: that which is a hundred-and-one-fold is seven-fold; and that which is seven-fold is a hundred-and-one-fold."²⁹

From the statement that they lay down sets of seven bricks one hundred and one times, where seven bricks evidently represent seven intercalary months, it is clear that by the time of the *Śatapatha Brāhmaṇa* the number of the twenty years' cycles amounted to 101. It is, therefore, clear that by that time there had elapsed $101 \times 20 = 2020$ years in the era of the Vedic poets.

I have already pointed out how the statement of the *Atharvaveda* (XII. 3, 16), that thirty-three gods pertain to the seven sacrifices, can be explained as implying the thirty-three months forming one of the wings or halves of the last cycle of five years in the period of twenty years. Now, according to the Niyiḍ hymn³⁰ for the Viśvé Dēvas, the total number of gods amounts to 3339. Dividing this by 33 we have $\frac{3339}{33} = 101 \frac{1}{11}$ cycles of twenty years each. This is a number which is almost exactly equal to the number of layers of the one-hundred-and-one-fold altar referred to above.

²² *Sat. Bra. X. 2, 3, 18.*

²³ *Sat. Bra. X. 2, 4, 2.*

²⁴ *Sat. Bra. X. 2, 4, 5; the italics are mine.*

²⁵ See Harg's Translation of the *Āitareya Brāhmaṇa* III. 3, 31; also his note on the number of gods.

²⁶ *Ibid. X. 2, 4, 1.*

²⁷ *Ibid. X. 2, 4, 4; the italics are mine.*

²⁸ *Ibid. X. 2, 4, 7.*

²⁹ *Sat. Bra. X. 2, 4, 3.*

Again we know that what are called Châturmāsya are three intercalary periods of four months each. From the formula of these Châturmāsya given in the *Satapatha Brāhmaṇa* (XI. 5, 2, 10), we can arrive at the same number of years. The passage in which this formula is given is thus translated by Prof. Eggeling:

"Now, indeed, the formulas of these seasonal offerings amount to three hundred and sixty-two Brihatī verses; he thereby obtains both the year and the Mahāvratā; and thus, indeed, this sacrificer also has a two-fold foundation; and he thus makes the sacrificer reach the heavenly world and establish himself therein."

It is a fact that the Vedic poets usually represent a day by a syllable.³¹ Accordingly, the number of syllables contained in 362 Brihatī verses must represent 362×36 days contained in all the Châturmāsya so far counted. Expressed in months, they will be $\frac{362 \times 36}{30} = 434\frac{2}{3}$ months intercalated in cycles of $2\frac{1}{2}$ years each. Hence the number of years will be equal to $\frac{2172}{2} \times \frac{1}{2} = 1086$. But as stated in the passage, the sacrificer must have a two-fold foundation, i.e., the era, and establish himself therein. Hence doubling the number, we have $1086 \times 2 = 2172$ years. It is unnecessary to point out here that these various numbers of years in the era of the Vedic poets, though differing from each other a little, lead to the same conclusion that I have arrived at in my *Gardm Ayana*, "the Vedic Era," where I showed the lapse of 465 intercalary days equivalent to $465 \times 4 = 1860$ years. That this era of nearly 2000 years had elapsed by the time of Parikshit, the grandson of Yudhishtira, the hero of the Mahabharata war, is a point worthy of the attention of scholars.

THE MYTH OF THE ARYAN INVASION OF INDIA.

BY P. T. SRINIVAS IYENGAR, M.A.; VIZAGAPATAM.

It is well known that most writers on modern history have not escaped the bias of their political or religious convictions, however impartial they have tried to be. In the selection of facts, in the method of marshalling them to point to a moral, Hume was as much dominated by his Tory proclivities as Macaulay was by his Whig predilections. This applies in a small measure to ancient history, too. When the theory of the great civilised Aryan race was started, German patriotism claimed the Aryans to have been originally tall, fair, and long-headed, and the direct ancestors of the modern Teutons. French patriotism insisted that the language and civilisation of the Aryans came into Europe with the Alpine race, which forms such a large element in the modern French population; while the Italian Sergi, who belongs to the Mediterranean race evolved from an African stock, credits his own race with originating the Græco-Roman civilisation, and believes that the Aryans were savages when they invaded Europe. This colouring of history by the sympathies of the historian is not an unmixed evil, for to it we owe the rehabilitation of the character of Catholic sovereigns and statesmen by Lingard, and the explosion of the myth of the Saxon extermination of the Celts in England by leaders of the pro-Celtic movement of our own days. The eye of sympathy can alone pierce through the thick veil of interested misrepresentation, and emotion must co-operate with cold reason in the recovery of historic truth. It is not in history as in physical science where passion cannot blind the eye to facts. The Dravidians, the Dasyus, the Dāsas—by whichever of these three names we may choose to designate the bulk of the people of India since historic times—have suffered from the misrepresentation of the Aryan *Rishis*, who composed the *Vedas* in the remote past, and of the ancient Indian commentators and modern European and American expounders of the sacred Scriptures of the Hindus. At the same time a mythical Aryan race has been built up out of scattered allusions in the Indian writings, and credited with the invasion of India, with the extirpation in some places, and absorption into the capacious Aryan fold in others, of the numerous tribes that occupied this vast continent. This theory appealed to the prepossessions both of those who

³¹ *Maithrāyaṇya Sam.* I. 7, 3.

³² First printed from the *Journal of the Royal Society of Arts*, July 1912, revised by the author.

believed in the re-population of the world by the three sons of Noah, and of those who speak what are supposed to be dialects of the "Aryan" speech. Being myself a Dravidian I propose to submit the theory of the invasion of India by the Aryan race, and of the extraordinary expansion of that race on Indian soil, to the test of reason inspired by sympathy for the Dravidian.

The comparative study of languages was born when it was discovered that the languages of North India, Persia, Armenia, and practically the whole of modern Europe, all belonged to one linguistic group. The wide spread of these languages, now generally called the Indo-Germanic, was explained by the supposition that a race of people that spoke the parent form of these languages inhabited the regions beyond the Hindu Kush, and in prehistoric times sent streams of colonists to Persia, to India, to Armenia, and on to Europe. The flush of enthusiasm caused by such a brilliant recovery of ancient history by the study of languages was heightened by the emotional satisfaction due to the notion that the Germanic races that dominate the world to-day were of the same stock as the haughty Brahman of India, who has, like Saturn, gloomed by himself in the horizon of India for several millenniums, has guided its destinies in fields intellectual and political, and been responsible for the grandeur of its philosophy, and for the political ineptitude of its people. The name *Arya*, which originally belonged to certain Indian tribes that followed the fire cult in the valley of the Punjab, and spoke an ancient form of the language whose later literary form was called the Sanskrit, the polished speech, was extended to this imaginary race, partly because Vedic Sanskrit—the language of the *Aryas*—was believed to be the most primitive form of the Indo-Germanic tongues, and also because the word *Arya*, whatever its derivative meaning, meant "noble," and was, therefore, a fit designation for the great race that was believed to have civilised Southern and Western Asia and the whole of the European continent, and to lead the van of the world's progress to-day.

Anthropologists soon pricked this Aryan bubble, and the great Aryan stock that peopled such a large slice of the world's surface soon became a small tribe that Aryanised Eurasia—i.e., transmitted its language and culture to other races. The original habitat of this much shrunk tribe was shifted in 1878 from the regions round the Hindu Kush to the shores of the Baltic by Pötsche, and in 1889 to Russia by Taylor. In 1901, Sergi maintained that the Aryans were "of Asiatic origin," and "were savages when they invaded Europe; they destroyed in part the superior civilisation of the Neolithic populations and could not have created the Græco-Latin civilisation."² In 1911, Dr. Haddon, the greatest living authority on ethnology, carefully avoided the mention of the word 'Aryan' in his admirable account of "the wanderings of people" in Europe. The "Aryan race" has been given the quietus so far as Europe is concerned.

The theory of the invasion of India by the "Noble Aryan," and of the extinction in some places and the subjugation in others of the "savage Dasyn," was promulgated by Max Müller, Muir and other Sanskrit scholars in the middle of the nineteenth century, and has since been an article of creed with writers of the history of India. In 1891 and 1892 Risley attempted to supply this theory with an anthropometric foundation. Dr. Haddon summarises the results of Risley's researches in these words: "The Aryan type, as we find it in India at the present day, is marked by a relatively long (dolichocephalic) head, a straight, finely cut (leptorhine) nose, a long, symmetrically narrow face, a well-developed forehead, regular features, and a high facial angle. The stature is fairly high. . . . and the general build of the figure is well proportioned and slender rather than massive."³ These investigations were based chiefly on "the distinction between the fine and coarse type of nose," and on the theory that in India the nasal index "ranks higher as a distinctive character than the stature, or even than the cephalic index itself." This "Aryan type" is found in the purest form in the Punjab valley and, in other parts of India, is mixed with another type, called by Risley the "Dravidian type." To account for the existence of a "pure Aryan type" of non-Indian origin in the Punjab valley, Risley assumes that the "Aryans" must have moved into India with wives and children, "by tribes and families without any disturbance of their social order," at a time when north-western

² Sergi, *The Mediterranean Race*, p. vi.

³ Haddon, *The Study of Man*, pp. 193-4.

India must have been open "to the slow advance of family or tribal migration."⁴ The previous inhabitants of the fertile valley of the Five Rivers politely retreated before the advancing "Aryans," so that the purity of the "Aryan type" might not be polluted; and when the "Aryans" had moved into the Punjab, an obliging Providence ordered that the north-western frontier of India should be "closed to the slow advance of family or tribal migration." Granting that all these miracles took place four thousand years ago, does subsequent history help us to believe that this Aryan type has remained unpolluted in the Punjab? Innumerable races have poured into India through the north-west in historic times. Persians, European Greeks, Bactrians, Scythians, Huns, Afghans, Tartars, and Moguls, have all invaded India and settled in larger or smaller numbers in the Punjab, and been absorbed in its "Aryan" population. It requires great scientific hardihood to maintain that the nasal index of the Punjabi has remained unaffected by this age-long welter of races.

Apart from the measurement of noses, the only other source of information regarding the "Aryans" of India is the *mantras* of the *Vedas* of the Hindus. These *mantras* were composed by *Rishis* belonging to tribes who called themselves *Ārya*, and who called certain other tribes *Dasyu* or *Dāsa*. In later days *Ārya* meant "noble," and *Dāsa* meant "a slave," but it is not possible to find out with certainty what these words meant originally. The *Ārya* and the *Dāsa* fought with each other frequently; but as frequently *Dāsa* tribes were auxiliaries of *Ārya* tribes in fights among themselves. None of these conflicts are incidents of a war of invasion. The *Āryas* do not speak of themselves as invaders gradually driving the aborigines before them, and wresting their land from them. There is no trace of the inveterate habit of people settling in a new land, that of importing into the land of their adoption geographical and personal names from their far-off original homes. In the Vedic hymns there is not even the slightest reference to or memory of any land outside India which the ancestors of the *Āryas* inhabited, no hint of the route through which they came to India, no phrase reminiscent of any foreign connection. Nor is there anything to indicate that they were gradually or suddenly moving hordes; the *Āryas* of the Vedic *mantras* speak of themselves as people living in the Indus-Ganges valley, leading a settled life in towns and villages, ploughing the soil and tending their numerous herds of cattle. Their kings, petty chiefs, lords of towns, and heads of villages, their village assemblies, political and religious, their irrigation canals and their roads, their threshing-floors and water-troughs for cattle, all indicate that the *Āryas* lived in an organised society in the Vedic times. Nor were the *Dasyus* savages. It is true the *Āryans* do not refer to them in complimentary terms; but even from the contemptuous references to the *Dasyus* in the hymns of their *Āryan* enemies, we can easily infer that they were not savages, but lived like the *Āryans* in towns and villages. They owned many castles built of wood like the castles of the *Āryas*. Their chariots, horses, and cattle proved a standing temptation to the *Āryas* to attempt to raid them. Thus all the available evidence shows that the *Dasyus* were not savages, but at least as civilised as the *Āryas*. There is nothing in the *mantras* from which the physical characteristics of the *Āryas* or the *Dasyus* can be inferred. There is a solitary word (*anāsa*) used in reference to the *Dasyu*, which has been variously interpreted as "mouthless," or "faceless," or "noseless," and some scholars believe that this refers to the nose of the Dravidian, "thick and broad," and the formula expressing its proportionate dimensions, "higher than in any known race, except the Negro."⁵ There are also references to the "black" colour of the *Dasyu*; but, in some passages, this certainly refers not to the human enemies of the *Āryas* but to demons whom they dreaded, and, in others, it is not easy to decide whether the word is used metaphorically or literally. To construct theories of racial characteristics on the shifting foundations of solitary phrases of very doubtful import, and in the total absence of any other evidence, is speculation run mad.

The only certain difference between the *Ārya* and the *Dasyu*, frequently referred to in the *mantras*, is one of cult. Whatever the etymological meaning of the word *Ārya* may

⁴ *Imperial Gazetteer of India*, I. p. 303.

⁵ Haddon, *The Study of Man*, p. 104.

have been in the *mantras*, Hindu commentators on the *Veda*, from the authors of the *Nirukta*, down to Śāyana, have explained it as "the son of the Lord," "the wise performer of the (fire-rites)," "wise worshippers," "practisers of fire-rites," "he who has attained a high position through the performance of fire-rites." On the other hand, innumerable passages in the *mantras* describe the Dasyu as "devoid of (fire-rites)," "opposed to the (fire-rites)," "without Indra," "offerers of worthless libation," "fire-less," etc. From this it is evident that the Dasyus incurred the hatred of the Āryas, because they did not worship the Aryan god Indra, and did not, like the Āryas, offer sacrifices through Agni, the fire-god, the mouth of the Aryan gods and the mediator between them and their human worshippers. The Dasyus, like the Āryas, killed animals in sacrifice to their gods, and we may presume that, like the followers of many modern non-Aryan Hindu cults, they poured the blood of the slaughtered victims at their altars. The Dasyus must have hated the fire-rites of the Āryas as a strange innovation, and they are described as "revilers" of the (Ārya) gods and rites, and are said to have frequently interrupted their performance. The *Nirukta* defines a Dasyu to be one that "destroys fire-rites." Besides offering animal sacrifices through fire there was a special libation that distinguished Ārya worship. More than the flesh of bulls and goats, Indra, the Ārya god, loved the intoxicating juice of the *soma* plant,⁶ and his worshippers, inspired by liberal draughts of *soma* juice, ventured forth to raid Dasyu settlements, and bring back their cattle and their women as prizes of war. In comparison with *soma*, the offerings of the Dasyus to their gods were regarded by the Āryas as "worthless oblations." The Āryas also frequently refer to the Dasyus as "prayerless," "enemies of prayer," "those that do not employ hymns." This indicates another line of cleavage of cult between the Āryas and the Dasyus.

All Aryan sacrifice, of animal or of *soma*, of corn or of cake, was accompanied with recitations of "prayers," either composed for the occasion or taken from a pre-existing stock of *mantras*. These *mantras* were composed in an early literary form of the tongue that later gave birth to classical Sanskrit. This Vedic language must have entered India primarily as the hieratic dialect of the followers of the fire-and-soma cult. Before the Vedic tongue reached India, dialects of two linguistic families other than Indo-Germanic were spoken in India. To-day those of the speakers of the Dravidian and Munda languages that have not yet been Aryanized still follow "fireless" cults. As similar cults are universal among the un-Aryanized part of the people of North India also, we may be certain that the Dravidian and Munda languages now associated with the "fireless" cult were once spread throughout India. Those of the people that became Āryas, i. e., joined the fire-and-soma cult necessarily learnt the language in which the rites were conducted. It must be added that there is no indication in the Vedic *mantras* as to what the languages of the Dasyus were.

The fire and *soma* cult and the Vedic speech, then, and not differences of race, distinguished the Vedic Āryas from the Vedic Dasyus, in so far as we can judge from the *Vedas*. There remains to be discussed the question whether this cult and this speech were suddenly transplanted among the Āryas by any considerable body of foreigners, or whether they were slowly spread among them, undergoing changes in the process. The mere entry into a country of a foreign cult and a foreign tongue does not prove any appreciable ethnic disturbance of it. Dr. Haddon says: "It is astonishing with what ease a people can adopt a foreign language, which, however, almost invariably undergoes a structural and phonetic modification in the process."⁷ It is well known to students of comparative grammar that the Vedic parent of Sanskrit is profoundly different from the original Indo-Germanic. In this, as well as in certain respects of structure, most of the Euro-Indo-Germanic dialects are nearer the original

⁶ The *soma* plant has not yet been identified, but, judging from the methods of preparation of *soma* and its effects on man as described in the *Vedas*, it must be akin to the *Humulus* (hemp) of modern times. The *soma* juice was drunk without being fermented, and mixed with milk or curds, or was cooked with flour and honey.

⁷ Haddon, *The Wanderings of Peoples*, p. 10.

tongue than the Vedic speech. This shows that the Vedic tongue came to India as a foreign language, and underwent there a levelling down of its vowels and other alterations. Now, as regards the cults, associated with this language. The *soma* plant is described in the Vedic *mantras* as growing on distant hills, like those of Gandhâra, and generally procured with some difficulty, and stored in a dried-up form as *châras* is to-day. In later times, when the centre of the fire cult shifted into the heart of India, the *soma* plant could not be procured, its identity was forgotten, and substitutes came to be used in its stead. The *soma* cult flourished in ancient times in Persia. We may thence infer that it found its way into India from without. But once it was introduced, it underwent a great development in this country. The Aryan *Rishis* appreciated the virtues of *soma* juice so much that a large part of the Vedic *mantras* is devoted to its praise; King Soma attained a distinguished position in the Vedic pantheon, and the *soma* sacrifice became the principal rite of the Brahman. The fire cult, like the *soma* cult, existed in ancient Persia, but with this difference, that to the Persians fire was so holy that throwing offerings into it would pollute it; so parts of the bodies of slaughtered animals were shown to the fire and thrown aside. As in India the offerings to gods were burnt out in the sacrificial fire, the fire cult underwent a fundamental change in this country.

When the cult changed, there resulted a corresponding and equally profound change in mythology. It is surprising that though the language of the Avesta and that of the Veda are so nearly allied that very often a sentence of the one can be turned into the other by merely making the necessary changes, there is very little in common between Avestan and Vedic mythology. In fact, quite as little of the mythology associated with the ancient Iran'ian speech as of that with the Indo-Germanic *ursprache* seems to have reached India. The only god common to the Vedic Âryas and the races that spoke Indo-Germanic dialects in Europe is Dyaus, and Dyaus is scarcely worth the name of god in the Vedic pantheon, being so little removed from the physical sky. Then, again, Mitra is practically the only god common to the Vedas and the Zend Avesta, and is in both literatures a subordinate person. Indra, the chief god of the Indian Âryas, is a minor demon of the Iranian Âryas. Varuṇa was unknown in Persia. All other Indian gods* are of pure Indian origin, Rudra, Viṣṇu, Aditi, Maruṭa, Aśvins, Ushas, etc. The very name of the fire god, Agni, is also Indian, the corresponding Persian god being Atar. It is impossible to discuss here how many of the Vedic gods were borrowed from the people of India, and then Aryanized, and how many were evolved on Indian soil from pre-Aryan sources latent in Aryan speech, but the fact is striking that so few Aryan gods came to India along with Aryan speech.

From this we see that the language and the cult of the Âryas were borrowed from without, and profoundly altered on Indian soil. If this cultural drift had been accompanied by any appreciable racial drift, if the cult and the language had been brought into India by any considerable body of foreigners, who formed a race by themselves, and lived apart from the native races, neither the cult nor the language would have undergone such serious alterations as they have, but would have remained relatively pure. Hence the only conclusion that is borne out by the facts that a foreign tongue, the Vedic, and a foreign cult, the fire and *soma* worship, drifted into India from without, and were adopted by certain tribes, later called Aryas, among whom the cult and the speech developed in new ways, and distinguished the tribes that possessed them from the other tribes of this country.

* The comparative study of religion has brought out the fact that the movement of religious thought in early times was not from polytheism to monotheism, but the other way about, from tribal monotheism to inter-tribal polytheism. In his *Religion of Egypt*, p. 4, Professor Flinders Petrie says: "Wherever we can trace back polytheism to its earliest stages, we find that results from combination of monotheism." The polytheism of the Vedas is one of the many proofs that the Vedas refer not to the beginning of any cult, but the culminating stage of many pre-existing tribal cults, which had coalesced chiefly out of political causes. This is the real explanation of the perplexing henotheism (as Max Müller called it) that runs throughout the Vedic *mantras*. At the time of the composition of the Vedic hymns, the tribe that worshipped Indra seems to have acquired predominance over the tribes that worshipped other gods.

Even among the Āryas this cult was but superimposed on, and did not oust, pre-existing cults. It mingled with the previous totemistic cults implying the worship of animals—like the cow, the hawk, and the serpent, of trees like the *ficus religiosa*, of hill divinities, and river goddesses; it also mixed with innumerable religio-magical practices based on animistic beliefs, all which are abundantly referred to in the Vedic *mantras*, and are prepotent to-day in India. But the fire-priests, some of whom, like the *Rishis*, composed hymns and instituted rites, and others like the *Hud*, the *Adhvaryu*, etc., assisted at the ritual, dominated the land from early times, and secured the patronage of kings. As they alone have left literary monuments, they loom large in the early history of India; but we must not forget that the bulk of the people of India followed, and still follow, the non-Āryan "fireless" rites of the *Dasyus*, and the fire-rite was at no age more than the semi-esoteric cult of the few. The spread of the fire cult into the lower Ganges valley and into the Deccan has been mistaken by historians for the spread of the "Āryan race." There is no evidence of a racial dislocation in India in these early days. So far as is known the bulk of the people was stationary. The story of the *Rāmāyana* has been by some interpreted to refer to an ancient invasion of Southern India by the Āryans. But how the mythical defeat of a king of *Laṅkā* by a solitary ascetic prince, exiled from his kingdom, helped by his brother and by a South Indian monkey tribe, can mean the migration of a north Indian people, passes comprehension. In all the early books there is evidence of the spread of the fire cult and the gradual increase of the power of the fire-priests, but none of any racial drift. Even this gradual extension of the fire cult did not mean the adoption of it by the people, such as takes place when Christianity or Islam spreads in our days, but merely meant the predominance of the Brāhmaṇ and the adoption of forms of State fire-rites like the *Rājasāya* or *Aśvamedha* by kings for special public purposes. The fire-rite could not spread among the people, for from pretty early times the Brāhmaṇ alone was competent to act as the fire-worshipper, and kings could be admitted to the fire-worship, even in sacrifices peculiar to kings, only after being temporarily invested with Brahmanhood, and even they could approach only the outermost of the sacrificial fires, that at the entrance to the sacrificial hall. This fire cult gradually died out even among the Brāhmaṇs, and to-day but faint relics of it are followed in a half-hearted manner in Brāhmaṇ homes.

But from early days the name Ārya—which originally belonged to the tribes that had adopted the fire and soma cult—was transferred to the higher classes of the Indian peoples, who, whatever their beliefs and religio-magical practices, acknowledged the theoretical supremacy of the fire-priest; so much so that when Gaṇtama Siddhārtha founded an order of ascetics (*Bhikkhus*) open to Kshatriyas, in imitation of the Brāhmaṇ order of *Saṃnyāsins*, his *dhamma* was called *Ariya* (Ārya). When, in later times, modern Hinduism rose with its numerous castes each characterised by endogamy, and with its beliefs and practices conglomerated out of every cult that had grown in ancient India, the term Ārya was extended to every clan and every tribe that could lay claim to a high social status, and could enforce that claim. And, lastly, when the theory of the "Āryan invasion" of India was promulgated by European scholars, it was seized with avidity by the "higher castes" as affording a historical basis to their pretensions of superiority to other castes. And the result is that every member of every caste that calls itself "Āryan" believes that blue Āryan blood flows in his veins. Emotion plays a large part in the manufacture of history, and any theory that soothes the vanity of a people is straightway elevated to the rank of a fact; so to-day a scientific examination of the bases of the theory of a superior Āryan race is resented more in India than anywhere else in the world.

European Sanskrit scholars, who have mostly kept themselves aloof from the world's progress in the science of ethnology, still speak to-day of the "Āryan" invasion of India, and the supersession of the aborigines by the "Āryan," as if it were a fact. They do not realise that, as Dr. Haddon says, "the so-called Āryan conquest was more a moral and intellectual one than a substitution of the white man for the dark-skinned people—that is, it was more social than racial." But it is regrettable that Dr. Haddon, the cautious ethnologist, the most eminent authority on the social drifts of the world, should yet give his unhesitating adhesion to Risley's theory that

"Aryans, perhaps associated with Turki tribes," moved with wives and children into the Punjab about 1700 B. C., and completely displaced the previous population, and, what is more curious, their noses have remained unaltered since, notwithstanding that the Punjab has been the cockpit of races since the dawn of history almost down to our days, thus setting at naught at the same time the evidence enshrined in the Vedic Mantras and the necessities of the geographic control of all human affairs.

When all is said, there may still remain in the minds of some the feeling of doubt how a cult or a speech can travel by itself. The fire cult and the speech of the Āryas must have come to India in the wake of a peaceful overflow of people from the uplands of Central Asia into the plains of India, or been the result of a peaceful intercourse between the Indian people and foreigner. But theories cannot be built on metaphors, and there is absolutely no evidence at present to guide to a solution of the problem. What we know for certain from the researches of Anthropologists and Philologists is that nearly 5000 years ago a race of tall, fair-skinned, narrow-headed giants, lived in the great steppe land extending from the north of the Carpathians to the north of Persia. The conditions of their life made them lead a pastoral life and tame the wild horse. They were savages who continued in the stone age, while their contemporaries in Egypt, Crete, Babylonia and probably India had begun to use iron tools. Among them the Indo-Germanic languages were evolved. About 2,500 B. C., the drying up of their steppes led them to migrate to the west and the south. One branch of these people settled in Bactria where they learned to worship fire and drink soma. From them this cult and this tongue came to India. It is well-known that cults can travel far without the help of the sword. The Christ cult arose in Jerusalem, and, though promulgated by humble and despised people, spread through Europe within a short time. The Mithra cult started from Persia and spread also throughout Europe, even to remote Britain and for a long time proved a powerful rival to Christianity. Cults take with them a sacred language wherever they go. Latin spread along with the Roman form of Christianity to Britain and Germany and profoundly affected the languages of those countries. So the fire cult spread in India, the "divine" soma juice providing sufficient temptation to people to take to the Aryan rites; along with the cult spread the Sanskrit language. How far Sanskrit spread as a language and how far it affected the languages of northern India, whether it supplanted any of them or degenerated into any of them or helped the existing languages to change into the modern vernacular is another story. This question has not been squarely faced as yet by any one and I propose to take it for discussion in a future article.

MISCELLANEA.

THE AGE OF SRĪHARSHA.

IN the concluding stanza of the fifth canto of his *Naishadhyacharitam* Śrīharsha refers to a work of his entitled *Śrīvijayaprasasti*, "the panegyric of the glorious Vijaya." In the concluding stanza of the 7th canto the poet refers to another work of his entitled *Gaudorevīśakula-prasasti*, "the panegyric of the family of the kings of Gauda"; in that of the 17th canto to *Chhindaprasasti*, "the panegyric of Chhinda"; in stanza 151 of the 22nd canto to *Navasahasāṅkacharitam*, "the life of Navasahasāṅka"; and in the concluding stanza of the same canto he states that "he received two *padas* and a seat from the king of Kanauj." If *Vijaya* of *Śrīvijayaprasasti* is identified with Vijayapala of the Pratihara dynasty of Kanauj, an inscription of whose time is dated in A. D. 960 (Kielhorn's *N. I. List* No. 39) and whose successor, Rājyapala, was a contemporary of Sultan Muhammad of Gami, Chhinda of the *Chhindaprasasti* with Lalla of the Chhinda family whose *Dawal prasasti* is dated in A. D. 992 (Kielhorn's *N. I. List*, No. 51); and Navasahasāṅka of the *Navasahasāṅkacharitam* with the

Paramāra king Sindhurāja of Mālva, who, according to Padmagupta's *Navasahasāṅkacharitam*, had the *virūda* Navasahasāṅka and succeeded Vakpati shortly after A. D. 994, we obtain a date for the author of *Naishadhyacharitam* that satisfies all the conditions. The king of Gauda to whom *Gaudorevīśakula-prasasti* was dedicated was Mahipāla I. Śrīharsha, like Bilhana in the 11th century, must have been a wandering paṇḍit in the beginning of his career, and visited the courts of Sindhurāja, Lalla, and Mahipāla I and tried to win their favours by dedicating *prasastis* to them, before he secured the patronage of the king of Kanauj.

RAMA PRASAD CHANDA.

NOTE.

I am afraid, Śrīharsha cannot be placed so early as the close of the 10th century, as Mr. Rama Prasad Chanda contends. I agree with Bühler (*Jour. Bomb. As. Soc.*, Vol. X, p. 31 ff.) in accepting the statement of Rājasekhara, author of the *Prabandhakosa* that Śrīharsha wrote the *Naishadhyacharita* at the bidding of Jayantachandra,

who can be no other than the Gāhaḍavāla king Jayachandra (A. D. 1172-87). At the end of this work he tells us that when he composed it he was receiving a couple of batels and a seat of honour in the court of the king of Kānyakubja. And this is in consonance with what Rājasekhara has said, because Jayachandra was a king of Kanauj. Vijaya of his *Vijaya-prastāvi* can thus be no other than Jayachandra's father, Vijayachandra (A. D. 1155-9). Śrīharaba was also the author of the *Arṇava-varṇana*, as seems from the concluding verse of canto IX. of the *Naishadhīya-charita*. *Arṇava-varṇana* has been wrongly translated by "description of the sea." It really means "description of (king) Arṇava." And this Arṇava undoubtedly is Arṇorāja, who belonged to the Chāḥmāna dynasty of Sāmbhar,

who was a contemporary of the Chaulukya Kumārāpāla, and for whom we have the date V. E. 1196=A. D. 1132. This identification confirms the conclusion that Śrīharaba was a protégé of Jayachandra. Chhinda of his *Chhinda-prastāvi* is not, as Mr. Rama Prasad Chanda supposes, Lalla of the Chhinda family whose record is dated A. D. 992, but appears to be the Chhinda chief of Gayā, referred to in an inscription dated in 1813 after Buddha's Nirvāṇa=A. D. 1176 (*ante*, Vol. X. p. 342). It is difficult to determine who was the hero of his *Narasāhasādhā-charita*. Perhaps *Narasāhasādhā* may be an epithet of Jayachandra himself. The name *Gauḍ-orilla-tula-prastāvi* does not refer to any specific ruler of the Gauḍa country.

D. R. B.

BOOK-NOTICE.

THE *GAṆITA-SĪRA-SANĠRAHA* of Mahāvīrācārya with English Translation and Notes, by M. RANGACHARYA, M.A., Rao Bahadur, Professor of Sanskrit and Comparative Philology, Presidency College, and Curator, Government Oriental Manuscripts Library, Madras, published under Orders of the Government of Madras. Madras: Printed by the Superintendent, Government Press, 1912.

ONLY very few early Indian Mathematical works, irrespective of commentaries, are known to us. If we name those of Aryabhaṭṭa, Varāha Mihira, Brahmagupta, and Bhāskara, we practically exhaust the list. All these men were natives of North India. Mahāvīrācārya is the first South Indian, whose work has been made accessible to us. And hence we have every reason to be grateful to Mr. Rangachārya who, in editing the *Gaṇita Sārasaṅgraha* with the help of barely sufficient materials, has done a laborious work, and has performed it with conspicuous ability.

Mahāvīrācārya lived in the time of the Rāstra-Kuṭa Emperor Amoghavarya Nṛpatuṅga. He belongs, therefore to the middle of the ninth century A. D. He takes his place between Brahmagupta in the seventh, and Bhāskara in the twelfth century. For the history of Indian Mathematics it would be interesting to know what Mahāvīrācārya's relation was to his predecessors. He nowhere names them. His editor concludes that he was "familiar with the work of Brahmagupta and endeavoured to improve upon it," because "his classification of arithmetical operations is simpler, his rules are fuller, and he gives a larger number of examples for illustration and exercise." But perhaps this may not

be sufficient to prove that he looked upon Brahmagupta "as a writer of authority in the field of Hindu astronomy and mathematics." Simplification is hardly the usual mark of progress in Hindu science. Professor D. E. Smith, in his introduction to the edition, comes to the conclusion that "the works of Brahmagupta, Mahāvīrācārya, and Bhāskara may be described as similar in spirit, but entirely different in detail." Still the fact that Mahāvīrācārya was a Jain, and that Jainism originated and spread from the country with the capital "Pāṭaliputra where Aryabhaṭṭa wrote" points to the line of descent of Southern Indian mathematics.

The scope of the *Gaṇita Sārasaṅgraha* may be seen from the Table of Contents. The work consists of nine chapters which treat of the following subjects: (1) terminology; (2) arithmetical operations; (3) fractions; (4) miscellaneous problems on fractions; (5) Rule of three; (6) minor problems; (7) calculations relating to the measurement of areas; (8) calculations regarding excavations; and (9) calculations relating to shadows. The edition is provided with four useful appendices on: (1) Sanskrit words denoting numbers with their ordinary and numerical significations; (2) Sanskrit words used in the translation and their explanations; (3) answers to problems; (4) tables of measures. On page 298, in Appendix XII, *daśa*, ten, has been inadvertently explained as "the tenth place," instead of the second place in notation; see page 7 of the English translation.

A. F. RUDOLF HOERNLE.

THE OBSOLETE TIN CURRENCY AND MONEY OF THE FEDERATED MALAY STATES.

BY SIR R. C. TEMPLE, BART.

Prefatory Remarks.

MR. W. W. SKEAT placed at my disposal some time ago a number of notes made on the spot, and some correspondence with Mr. G. M. Laidlaw from other notes made in Perak, relating to the tin currency and money in use in the Federated Malay States up till about 1880. I now address myself, without pretending to exhaust the subject, to the very difficult task of solving the mystery of this currency and coinage.¹

Before attacking the subject directly, I preface my examination by standard tables of the money established by the Dutch and British East India Companies in their Settlements in the Malay Peninsula, in order to make the comprehension of my conclusions and arguments the easier for the reader.

Standard Tables of Malay Money.

1. Table showing the old Dutch popular method of reckoning.

4 pitis, pene (cash)	make	1 duit
2½ duit (cent)	make	1 dubbeltje, wang baharu (copper)
2½ dubbeltje	make	1 kēndēri perak (silver)
2 kēndēri (candareen)	make	1 tali (string of cash)
2 tali	make	1 suku (quarter)
4 suku	make	1 ringgit (Sp. dollar, real)

400 cash to the dollar of 100 cents.

2. Table showing the modern British popular method of reckoning.

4 pitis, kēping, ² duit (cash)	make	1 tēngah sen (half cent)
2 tēngah sen	make	1 sen (cent)
2½ sen	make	1 wang baharu (copper)
2 wang baharu	make	1 buaya ³
2 buaya	make	1 kupang
2½ kupang	make	1 suku (quarter)
2 suku	make	1 jampal
2 jampal ³	make	1 ringgit (dollar)

400 cash to the dollar of 100 cents.

¹ I would like to acknowledge here the kindness of Mr. C. O. Blagden in going over the whole MS. and giving valuable hints and information throughout. My own previous researches into kindred subjects relating to the Far East may be of use to the student, and will be found:—*Currency and Coinage among the Burmese*: *ents*, vol. xxvi. (1897), pp. 154, 197, 232, 253, 281, 309; *xxvii.* (1898), 1, 29, 37, 85, 113, 141, 169, 233. *Development of Currency in the Far East*: *ents*, vol. xxviii. (1899), p. 103. *Beginnings of Currency*: *ents*, vol. xxix, pp. 29, 61. *Siamese and Shan Weights*, *ents*, vol. xxvii, p. 1; *Chinese Weights*, p. 29; *Malay Weights*, p. 37; *Burmese standard (animal) Weights*, p. 141. *Kobang, a Malay Weight*: *ents*, vol. xxvii, p. 223. *Kēping and Kupang*, *ents*, vol. xxxi, p. 51. *Derivation of Sapéque (sa-paku, string of cash)*, *ents*, vol. xxvi, p. 222; of *Sataleer (sa-tali, string of cash)*, p. 280; of "Double Key" (*dubbeltje*), p. 235; of *Tickal*, pp. 245, 253-256. *Ratios of gold and silver*, *ents*, vol. xxxi, p. 322. See also Ridgeway, *Origin of Metallic Currency and Weight Standards*, p. 145 ff.

² *Kēping* means a bit, piece; *buaya* means a crocodile: both terms refer to the old tin ingot currency of the Malay States. There is another term, *kēping*, for a small copper coin or weight=half a duit, giving 800 (small) cash to the British dollar, a figure which is of interest in regard to many statements that follow. *Jampal* is used at Biau for 30 (not 50) sen or cents; Wilkinson, *Dict. s.v.*, also speaks of an "old dollar," of which the *jampal* was half. The main point for the present purpose is that *jampal*=half a dollar, or rupee.

It is important, in order to follow the remarks that succeed, to have the relations of the old Dutch and modern British money to each other, and also the terms, European and vernacular, used for both, as clearly as possible in the head. A comparative table is therefore given here.

8. Table of Malay Money in terms of cents to the dollar (ringgit).

Modern British and Old Dutch.

Modern British.		Old Dutch.	
cents.	vernacular names.	cents.	vernacular names.
$\frac{1}{4}$	képing, pitis and pichis, pese, pesi, ² duit ³ and $\frac{1}{4}$ duit, ⁴ cash	$\frac{1}{4}$	pese and pesi, ⁵ cash
$\frac{1}{2}$	tengah sen		
1	sen, duit ⁴	1	duit
2 $\frac{1}{2}$	wang baharu, ⁶ buaya (in accounts)	2 $\frac{1}{2}$	wang baharu, dubbelkje (<i>Anglice vulgo</i> double key ⁷)
5	buaya ⁸	6 $\frac{1}{2}$	këndéri perak, ⁹ pñjuru
10	kupang (also, for tin, kati, tam- pang, jongkong, raman)	12 $\frac{1}{2}$	tali (piak ¹⁰ in tin)
20	duapuluh sen		
25	suku (bidor and viss in tin)	25	suku ¹¹
50	jampal, ¹² mas	50	jampal
100	ringgit (tabil)	100	ringgit (tabil)

I have spoken above of the "mystery" of the Malay tin currency and coinage, because, until quite lately, specimens of it in the form of animals and birds were regarded as toys, even by local collectors of considerable experience; and even now persons long resident in the Peninsula seem to regard this currency as mythical, and the specimens coming to light from time to time as children's toys. Local observers have not, however, always thought so, *vide* the following instructive quotation in a translation from Klinkert, *Woordenboek, s. v. buwaiga*, crocodile—"A tin coin in the shape of a crocodile was minted in Selangor." Upon this Mr. Skeat comments:—"the Malay peasant of Selangor to this day reckons his small currency by the *buwaiga*. I have myself often heard it so used, though the thing itself went out of use in Selangor about 60-70 years ago (c. 1825),¹³ and is now never seen in Selangor itself. I was told this by some of the old K'lang Chiefs who spoke of the tin ingots being brought to the custom house at K'lang."

That both the solid tin ingot and the "animal" ingot currency of the Peninsula were known to traders in the 18th century, the following quaint quotation from Steven's *Guide to East India Trade*, 1775, p. 113, will prove:—"Tin is to be bought at New Queda, in the Straits of Malacca (you cannot go in there within a league of the shore for a bar) by the *bahar*, equal to 419 lb.

² In Singapore and formerly in Selangor: from Portuguese, *peso*, *pesi*.

³ In Penang a duit = cent: $\frac{1}{4}$ duit = duit elsewhere.

⁴ Wang means: "small change" synonymously with *seling* and *s'king* (Dutch skilling) for 5, 10, 20 and 50 cents. Wang baharu, the "new wang," was a copper coin = Dutch *dubbeltje*. In accounts the wang was 2 cents. For "double key" see ante, vol. xvi, p. 335.

⁵ Fulgo, *boya*, a reminiscence of the *buaya* (crocodile) tin ingot.

⁶ I. e., silver *këndéri* or *këndri* (sardeson). Klinkert (*Nieuw Maleisch-Nederlandsch Woordenboek*) calls this coin simply *perak* or *sa-perak* (silver piece) and makes it 5 cents. As a term of account *sa-perak* = 5 cents.

⁷ In weighing gold: 2 pñjuru (silver coins) = 1 piak or mayam; 4 piak = 1 jampal; 2 jampal = 1 real (pinnaid) or Spanish dollar. Piak is, however, not the same word as piak: Wilkinson, *Dict.*, s. v.

⁸ Suku is two strings or sets; it is the quarter dollar. Suku means properly "a quarter", originally, "a limb, leg."

⁹ This coin is now obsolete and rare = the Dutch *guilder*.

¹⁰ It was, however, clearly in occasional use till 1850 or even later.

English. The advantage is considerable if you pay it in dollars. Here your opium will sell with safety for better than cent per cent. The English and Portuguese country-ships¹² generally barter it for tin. The country-ships generally meet ours [E. I. Co.'s ships] and will sell their tin for rupees instead of dollars. But observe to get large slabs [*k'ping*] if possible. If you cannot get all large, you may take everything but their chain-stuff, like jack-chains, and thin stuff of birds¹³, etc. If you are obliged to take the small stuff, the officers must take care where it is stowed, or the sailors will steal it, for *samshoo* [native liquor or spirits]¹⁴, and keep a good look-out while taking in. If you buy of a country-ship, know whether they sell by the *Qaeda* or *Salengare bar*.¹⁵ The first is equal to 419 *lb.*, the other not so much."

What Stevens meant by this caution is clearly explained in a useful statement by that accurate first-hand observer Lockyer (*Account of the Trade in India*, 1713, p. 43): "200 *catty* Malley is 1 *bakar* of 422 *lbs.* 15 *oz.* . . . 1½ *China catty* is commonly reckoned 1 *catty* Malley, which brings 3 *pecull* China equal to a *bakar*, but should one buy after that rate one should be a looser in every *bakar*, for 3 *China pecull* will not hold out above 896 *l.* This is a very necessary caution: since I have known several suffer through neglect in examining disproportion in receipt."

I.

Tin Ingot Currency and Tin Money.

In a dissertation on the Beginnings of Currency,¹⁶ I explained that "barter is the exchange of one article for another: currency implies exchange through a medium; money that the medium is a token," and I differentiated currency and money thus¹⁷:—"Currency implies that the medium of exchange is a domestically usable article, and money that it is a token not domestically usable." Under such definitions iron spear heads, cooking pots (Siamese Shans), and ingots of tin (Malays of the Peninsula) are currency. But iron lozenges (Siamese Shans), imitations of iron hatchet (Nassau Islanders), of iron knives (Kachins and Shans of Assam), of iron spears (Nagas of Assam), of ingots of tin (Malayas of the Peninsula) are money. It is on the principle above-stated that I will proceed to examine the evidence at my disposal as to the tin *media* of exchange formerly in use in the Malay Peninsula.

There are in the Cambridge Museum certain specimens, both of the new obsolete tin ingot currency and tin money, which have been measured and weighed. In both instances the specimens refer to two scales of values.

The description given in the Museum Catalogue, obviously based on information supplied by the donors, is as follows:—

17. Tin Currency.

879. One block, very roughly cast, of truncated pyramidal form with string-hole, weight 19 oz., size across base 2"·2 × 2"·2.

¹² Ships owned in Indian ports though officered by Europeans. Yule, *Hobson-Jobson*, s. v. Country. They were in severe competition with the East India Company. See Sterens, p. 112, s. v. Malacca.

¹³ Stevens means by "thin stuff of birds," small tin *gambur* (model of animal) ingots: see *infra* p. 92. By "chain-stuff like jack-chains" and "small stuff" he apparently means strings of cash, though these are not in the least like jack-chains (i. e., with unwelded or unsoldered links at right angle to each other) unless we read the word "jack" in its sense of "smaller than usual." See O. E. D., s. v. jack and jack-chain.

¹⁴ See Yule, *op. cit.*, s. v. Samshoo.

¹⁵ Kedah or Selangor *bakara*. The modern Malay standard *bakara* or *bakaria* is approximately 31 *owt.* or 400 *lbs.*, but it varies locally from time to time in the reports of traders, and one of the difficulties of this enquiry is the gauging of the probable accuracy of reports from all sorts and conditions of men.

¹⁶ *Ante*, Vol. xxix, p. 33; J. R. A. I., 899, pp. 99-122.

¹⁷ *Op. cit.*, p. 32.

880, 881. Two blocks, cast solid, similar to last, but with a receding step two-thirds up from the base, weight 112 oz., and 98 oz. respectively, the heavier measuring 4" \times 4" \times 5 at the base and 2" \times 7 in height. They were formerly used in Selangor for the payment of duty on tin, but also passed as currency for general merchandise (their value was 25 cents: tin being then worth only 15 dollars the *pikul*).

882. One of similar form, but taller, with curved sides and no step. Its squared top is stamped in relief with an X-like mark, on the base of one face with two bold ridges, and on the opposite side with four smaller ridges. Weight 72 oz. Size 4" \times 4", by 2" \times 7 in height.

883-885. Three: the base (of plain truncated pyramid) being surrounded with a wide flat rim. The flat top is stamped with a quatrefoil, the *tampo' manggis*.^{16a} Weights respectively 30 oz., 22½ oz., and 12½ oz. This variety called *sa-tampang*, i. e., a block or a cake, or when small *sa-buaya*, was used, prior to the establishment of English rule, for the payment of tin duty. Value of the larger coins 10 cents, of the smaller 2½ cents, but tin was then less than half its present value.

886-888. Three similar in shape to the last, but cast hollow, and called by the same name (*sa-tampang*). Top plain, but the wide base rim bears an inscription. These token coins, evidently derived from the solid form, are still current in Pahang. Two of 4 oz., value 10 cents, and one of ½ oz., value 1 cent."

Mr. Skeat and Professor Ridgeway, however, some years ago weighed and tabulated the Museum specimens and arrived at results which I now put forth as follows:—

Cambridge Museum.

Ingot Tin Currency from Selangor.

I. Form



mint¹⁷ mark



Museum number.	Name	Approx. fraction of dollar.	Approx. nominal weight oz. av.	Actual weight. oz. av.
885	buaya ¹⁸	1/20	11½	12½
884	tampang (kati)	1/10	22½ (1½ lbs.) ²⁰	22½
883	piak (tali)	1/8	28	30
	bider ²¹	1/4	56 (3½ lbs.)	
881	2-buaya piece	2/5	90	98
880	jampal	1/2	112	112
	dollar ²² (ringgit)		224 (14 lbs.)	

II. Form



mint marks: top



sides 

and 

879 ²³	jongkong (kati)	1/10	22½	19
882	karakura ²⁴	1/3	70	72

^{16a} *Tampo' manggis*, represents the "rosette" at the end of a mangosteen fruit opposite the calyx. It has divisions indicating the number of the sections within, generally 3, 4, or 5.

¹⁷ Mint at Kerayong in Ulu Klang in Selangor.

¹⁸ Called *tampo' manggis* or mangosteen rosette. It is not a quatrefoil as the Cambridge *Catalogue* states. It occurs on the first three pieces. This form is called "pagoda" later on in these pages.

¹⁹ The meaning of this word is "crocodile."

²⁰ The *tampang* represents the *kati* of tin, which has a standard weight nowadays of 1½ lb. The term means a block or cake (of tin).

²¹ These have been inserted to complete the scale: the *bider* represents the current *saka*, or quarter dollar.

²² The top represents the mangosteen rosette, the sides are called *watumba* (?), after the sloping shelves of a tin mine (*tambong*). This form is called the "angaric" later on in these pages.

²³ This is a roughly cast specimen.

²⁴ The meaning of this word is "tortoise." Five other ingots have been weighed and are noticed *infra*, p. 94

Thomas Bowrey²⁵ writing about 1675 of Junkceylon has the following passage, which is of great value in this connection :—

"They have noe sort of coyned monies here, save what is made of tinne, which is melted into small lumps, and posse very current provided they be of their just weight allowed by statute : and are as followeth :—

one small lumpe or putta valueth here	3d English
one great putta is 2½ small ones value	7½d English

which is their currant moneys and noe other : but if wee bringe silver or gold massy²⁶ or coyned the rich men will trucke with us for tinne and give some advance, 10 or 15 per cent. upon the moneys.

"When wee have a considerable quantitie of these small pieces of tinne together, wee weigh with scales or stylyard 52 pound weight and ½, and melt it in a Steele panne for the purpose and runne it into a mold of wood or clay, and that is an exact cupine, 8 of which are one baharie weight of Janselone or 420 English pound weight.

"In any considerable quantitie of goods sold together, wee agree for soe many baharte, or soe many cupines ; when a small parcell, then for soe many viece, or soe many great or small puttas : 4 great putta make a viece ; 10 small ones is a viece."

From this statement is derived the following scale :—

2½ puttas small make	1 putta large
4 puttas large	1 viece
15 viece	1 cupine
8 cupine	1 bahar

It is here necessary to explain that *putta* represents the Malay *patah*, a fragment : viece, the well-known Indian and Far Eastern commercial weight viss [Tamil : *visai*,] of which the most persistent standard equivalent is 3½ lbs. : cupine, the Malay *kaping*, a slab of tin. From the two foregoing scales also is derived the important fact that the viss of commerce (3½ lbs.) represented the bidor or quarter dollar of the Malay tin currency (3½ lbs.).

Captain Forrest,²⁷ who visited the Mergui Archipelago in 1783, writes :—"Certain pieces of tin, shaped like the under half of a cone or sugarloaf cut by a parallel plane, called *poot*,²⁸ are used on the island [Junkceylon] as money : weighing about three pounds with their halves and quarters of similar shape : if attempted to be exported without paying duty, they are seizable. This encourages smuggling. The value of tin is from 12 to 18 Spanish dollars the *pecul* of 133 lb. put on board clear of duty."

This statement affords a comparative table in the following terms :—

Bowrey 1675		Forrest 1783	
2½ <i>patah</i> small make	1 <i>patah</i> large	2 quarter <i>put</i> make	1 half <i>put</i>
4 <i>patah</i> large	1 viss	2 half <i>put</i>	1 <i>put</i> (viss)

Forrest's *poot* is clearly the viss, and valuable information is procured from him as to the dual form of the currency, thus supporting the Cambridge Museum specimens ; one in the form of a "pagoda" and the other in that of a "sugarloaf." For the purposes of distinction these terms will be used to describe them here.

²⁵ *Countries Round the Bay of Bengal*, pp. 246 ff.

²⁶ *Mass* (vulgo *Anglice*, *massie*, *mass*) means the Malay gold of currency.

²⁷ *Voyage to the Mergui Archipelago*, Milburn, *Commerce*, 1813, II. p. 201, copies the information here and mixes it up with that to be found in Stevens' *Guide to E. I. Trade*, 1775, p. 127, and gives a table which is impossible on the basis that the *poot* is about 3 lbs. — 4 *poots* = 1 viss, 10 viss = 1 cupine, 8 cupine = 1 bahar of 476 lbs. Kelly, *Cambiat*, I. pp. 106, 121 (1835), copies Milburn, but makes the bahara of Junkceylon 485 lbs. and that of Todopa 476 lbs.

²⁸ Millies *Recherches sur les Monnaies Malaïes*, p. 140 f. n., suggests a possible derivation in the Siamese *phat*, which means *lamas*, sheets, slabs. Cf. Pallegoix, *Dict. Linguæ Thai*.

We are now in a position to set up provisionally two comparative tables; which will, however, require recasting somewhat as we proceed, thus:—

Comparative Table of Malay Ingot Tin Currencies.

Scale of Pagoda Currency corresponding to the modern British monetary scale			Scale of Sugarloaf Currency corresponding to the old Dutch monetary scale		
cents ²⁹ to the dollar	name	approx. weight in oz. av.	cents ²⁹ to the dollar	name	approx. weight in oz. av.
5	buaya	11½	2½	patah (small)	5½
10	tampang (gajah) ³⁰	22½ (1½ lb.)	6½	patah (large)	14
12½	tali	28	10	tampang (kati)	2½ (1½ lb.)
25	bidor	56 (3½ lb.)	[12½]	ayam bēsar	28½ ³¹
			25	viss	56 (3½ lb.)
40	buaya	90	31½	kurakura	70
50	jampal	112 (7 lb.)			
100	dollar (ringgit)	224 (14 lb.)	100	dollar (ringgit)	224 (14 lb.)
				kēping ³² a (jongkong)	52½ lb.
				pikul	140
				bahara	420

Certain useful facts come out of this table. The small *patah* is the *wang* or half *buaya*; the large *patah* is the *pajura* or half *tali*; the standard weight *kati* (usually 1½ lb.) and *bidor* or *viss* (3½ lbs.) are the same in both scales. The *viss* = 10 small *patah* and the *kurakura* = 5 large *patah* or 2½ *tali*. The two scales constantly dovetail into each other, and it will be observed that the "pagoda" scale corresponds with the modern British monetary scale and the "sugarloaf" with the old Dutch, as stated at the head of the table. (See *infra*, pp. 92 ff.)

Having thus established the fact that the unit of the ingot tin currency—the dollar—represented 14 lbs. or 10½ *kati* (at 1½ lb. the *kati*) of block tin, I will proceed to examine the tin money and to tabulate the Cambridge Museum specimens as follows:—

Cambridge Museum.

Table of Tin ("Hat"³³) Money from Pahang.

Form



I. Pagoda Scale.

Museum number	Name	Approx. fraction of unit (dollar)	Approx. nominal weight in gra. (unit 3120 gra.)	Actual weight in gra.	Actual number of grains represented in unit (dollar)
24I	buaya	1/20	156	160	3200
	jongkong ³³	1/12	260	260	3120
24H	bidor ³⁴	1/4	780	777	3108

²⁹ These columns are added for the sake of clearing the comparison of the scales.

³⁰ This word means elephant. The names crocodile, elephant, tortoise, cock, have been shown to help in elucidating what follows.

³¹ This term means "large cock" and is supplied from the scale of "ingot animal currency" (*infra*, p. 92).

³² a *kēping* here means a "slab" of tin.

³³ So called by European observers from its shape.

³⁴ Not in the Museum catalogue, but weighed at the Museum with the other specimens. The *jongkong* or *raman* of the tin money corresponded to the *tampang* of the ingot tin currency.

³⁵ Another piece was weighed out at 712½ gra., which seems to be a "light" *bidor*. I have in my possession two specimens of the *bidor*, both dated on the under part of the "rim of the hat" 1281 A. H. = 1864, with the word *empat* (four) attached to them, valued at 4 cents; and two specimens of the *buaya* both dated 1245 A. H. = 1829, with the word *satu* (one) attached, valued at 2 cents; but according to Mr. Laidlaw's informant the tin *buaya* was worth 5 *pitis* or 1½ cent. Much importance does not attach to unsupported valuations in terms of

II. Sugarloaf Scale.

24H	viss	1/4	780	777	3108
24G	kurakura	1/3	1040	1036	3108

Now the standard silver (Spanish) dollar weighs 416 grs., therefore $7\frac{1}{2}$ Sp. dollars weigh 3120 grs., and the references in the tin money table seem clearly to point to the subdivision of a unit of 3120 grs. This would mean that the ratio of silver money to tin money was 1 to $7\frac{1}{2}$, but by the tin ingot scales we find that the unit of that currency weighed 14 lbs. or $10\frac{1}{2}$ *kati*. That is, tin could be purchased at $10\frac{1}{2}$ *kati* to the unit (Sp. dollar) of either money. This represents its most persistent par price.

The general inference therefore from the above considerations is that the ratio of the unit of silver money to the unit of tin money was 1 to $7\frac{1}{2}$,³⁵ and that the ratio of the unit of money to the unit of ingot tin currency was 1 to $10\frac{1}{2}$. The difference between the two ratios represents the profit of the mint-owners of the tin money, which was thus 3 points in $10\frac{1}{2}$ or 28½%. Practically the gross profit to the mint on its production must have been 30 %, and considering the quality of the product, the method of minting and the prevailing low rates of labour, the net profit could not have been far short of the gross, say 25% of the value of the product. It was obviously to secure this profit that the weight of the tin money was fixed at $7\frac{1}{2}$ times that of the established silver money of the time, which was the Spanish dollar and its recognised divisions. The weight or intrinsic value of the tin money is thus accounted for. Its form merely imitated the contemporary form in which ingots of tin were usually cast.


The above conclusions are confirmed in an interesting and independent manner by a table to be made out of Mr. Laidlaw's letter dated 14th June 1904,³⁶ from Lower Perak.

cents	name	weight av. oz.
$\frac{1}{2}$	tahil	$1\frac{1}{2}$ oz.
$6\frac{1}{2}$	pēnjara	$13\frac{1}{2}$ „
$12\frac{1}{2}$	piak	$1\frac{1}{2}$ lbs.
25	suku	$8\frac{1}{2}$ „
50	jampal	$6\frac{1}{2}$ „
100	dollar	$13\frac{1}{2}$ „ (10 <i>kati</i>)
	kēping	50 „
	pikul	$133\frac{1}{2}$ „
	bahara	400 „

This shows that the weights and scales given to Mr. Laidlaw by his native informants are merely a reduction, on the Dutch system, of the former pre-European system of the ingot tin currency made to suit the exigencies of commerce under British rule, by making the dollar 10 *kati* and the *bahara* 400 lbs. In outlying parts of the Malay Peninsula the old Dutch system of reckoning fractions of the unit might be expected to outlast for some time the introduction of the modern British system, which is comparatively recent.

dollars by Malay informants, as they usually depend on the price of tin, as purchasable by dollars, from time to time. Cf. *infra*, p. 108. With the help of Mr. C. O. Blagden I have been able to read the legend on the larger specimens and partly on the smaller. They are interesting as exactly dating the issues. Thus the two larger are identical and read—*ini bilangan Pahang | dari tarikh senat 1281 | pada awal bulan | Rabi'ul-thani*: This [is] money of Pahang under date year 1281, on the 1st of the month Rabi'ul-thani, i. e., 3rd September 1864. The smaller coins are also identical and on them appears *Malik-al-Adil | tarikh | senat 1245 | | the just king | date | year 1829*. Perhaps *Malik-al-Adil* should be read *milki-'l-Adil*, full value, legal tender: see J. B. A. S., Straits Branch, No. 44, p. 215.

³⁵ Tavernier says (*infra*, p. 52) in the 17th century that the Malay tin coin which he figures weighed $1\frac{1}{2}$ oz. (= *kati*) and was worth in silver locally 2 *sous* (cents) = *wang*. This gives the ratio of silver to tin then as 1 : 5.

Perhaps the most interesting confirmation of all comes from some Portuguese coins described by Dr. Hanitsch, *J.R.A.S.*, Straits Branch, No. 44, p. 213 ff, as having been formed at Malacca in 1904 in two varieties. These were cast in the times of Kings Emmanuel (1495-1521) and John III (1521-1551), i.e., immediately or not long after the conquest of Albuquerque in 1511. These coins clearly imitated the indigenous tin ingot currency and approximated in denomination to the "bat" money. Five specimens of one variety weighed from 571 to 642½ grs. One specimen of the other variety was in the form of a truncated cone, and weighed 694½ grs. It seems to be fairly certain from what has gone before that they were meant to represent, in tin money, the visa or quarter dollar unit of tin.³⁰ They were obviously cast (not struck) in Portuguese moulds, as they all bear the cross and globe of Kings Emmanuel and John III of Portugal and the legends:—*Nostre (a) spes unica crux X P I* (for ) and *s(e)mp(e) r depu(l) sor diem (for deus)*. See also *infra*, p. 109, n. 15a.

II.

Gambar Currency.

(Tin Ingots in Models [*Gambar*] of Animals.)

It will have been observed that, among the names for pieces of ingot-tin currency, there have been introduced certain names of animals: *buaya*, crocodile; *kurakura*, tortoise; *gajah*, elephant; *ayam*, cock. These all refer to tin ingots cast in the forms of animals, specimens of which, brought together by Messrs. Skeat and Laidlaw, may be tabulated as follows on the evidence available.

Standard Tables³¹ of Gambar Currency.

No. 1: Messrs. Skeat and Laidlaw's information.

"Pagoda" Scale Corresponding to the modern British monetary scale.				"Sugarloaf" Scale Corresponding to the Old Dutch monetary scale.			
cents ³²	weight in oz. av.	name ³³	meaning	cents ³²	weight ³³ in oz. av.	name	meaning
5	11½	buaya	crocodile	6½	14	buaya kéchil ayam kéchil	small cro- codile ⁴⁰ small cock
				7½	17½	bélalang kéchil	small man- tis ⁴¹
10	23½	{ gajah kurakura kéchil	elephant ⁴² small ⁴⁴ tortoise	12½	28	ayam bésar	large cock ⁴³
20	45	bélalang pénengah	mid mantis	18½	42	bélalang pénengah	mid mantis
				25	56	kurakura pénengah	mid tortoise
				31½	70	kurakura bésar	large tor- toise
				37½	84	bélalang bésar	large mantis

³⁰ See Appendix I. *infra*.

³¹ If they are to be regarded as tin ingots, which is unlikely, then their value, according to weight varying roughly from 1½ oz. to 14 oz. av., would be 3 kipping or cash in a dollar of 400 cash. See *infra*, p. 93.

³² Variations from standard to almost any extent may be excepted in local finds.

³³ These columns are added to clear the comparison of the scales.

³⁴ These columns show correspondence with the Table of Ingot tin currency, *ante*, p. 90, 420 *fta.* to the *balara* of tin.

³⁵ One informant makes this set=the *buaya* of the Pagoda Scale at 5 cents.

³⁶ A Horniman Museum (London) specimen of mantis weighed 7½ oz. See Plate IV.

³⁷ The "elephant" is said to = 2 *buaya*: a average length of specimens, 9 in.

³⁸ The size of these "cocks" is given as 2 by 2 inches.

³⁹ Supplied from the Horniman Museum specimen.

In addition to the above specimens Mr. T. A. Joyce has sent me accurate weighments of others in the British Museum (Nos. 1905-11-16-1 to 8) and in his own collection.

Mr. Skeat has also weighed some in his. The actual weights are as under:—

Name	British Museum collection	Joyce collection	Skeat collection
gajah (elephant)	18,185 gra. 15,480 1,980	1,522 gra.	
ayam (cock)	1,910	2,727 1,735 1,348 380	2,738 gra. 1,450 550 547
buaya (crocodile)	26,420 ⁴⁵ 16,625 9,720 1,865 ^{46a}		

The practical identity of some of these specimens as representatives of currency and their relative proportion to each other is obvious. It is also clear that they have not been accurately cast, and so, for the purposes of this enquiry, I have turned their weight in grains into their approximately equivalent weight in ounces avoirdupois. These specimens may in this way be tabulated as follows:—

Standard Tables of Gambar Currency.

No. 2: Messrs. Joyce and Skeat's weighments.

"Pagoda" Scale.				"Sugarloaf" Scale.			
cents of a dollar	weight in oz. av. ⁴⁴		name	cents of a dollar	weight in oz. av. ⁴⁴		name
	nominal	actual approx.			nominal	actual approx.	
$\frac{1}{2}$	$1\frac{1}{2}$	$\frac{1}{2}$	ayam				
$\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	ayam (S) ^{45a}				
				$1\frac{1}{2}$	$3\frac{1}{2}$	$\begin{cases} 3 \\ 3\frac{1}{2} \\ 3\frac{1}{2} \end{cases}$	$\begin{cases} \text{ayam} \\ \text{gajah} \\ \text{ayam (S)}^{45b} \end{cases}$
2	$4\frac{1}{2}$	$\begin{cases} 4 \\ 4\frac{1}{2} \\ 4\frac{1}{2} \\ 4\frac{1}{2} \end{cases}$	$\begin{cases} \text{ayam} \\ \text{buaya} \\ \text{gajah} \\ \text{ayam} \end{cases}$				
				$3\frac{1}{2}$	7	$\begin{cases} 6\frac{1}{2} \\ 6\frac{1}{2} \end{cases}$	$\begin{cases} \text{ayam} \\ \text{ayam (S)} \end{cases}$
10	$22\frac{1}{2}$	$22\frac{1}{2}$	buaya				
				$15\frac{1}{2}$	35	$\begin{cases} 35\frac{1}{2} \\ 38 \end{cases}$	$\begin{cases} \text{gajah} \\ \text{buaya} \end{cases}$
				$18\frac{1}{2}$	42	$41\frac{1}{2}$	gajah
				$31\frac{1}{2}$	70	$60\frac{1}{2}$	buaya ^{46c}

⁴⁴ One leg apparently broken off.

^{45a} Mr. Joyce conjectures that this specimen is a lizard or insect. I rather think it is meant for a crocodile.

^{45b} See ante, p. 88.

^{45c} All the weighments are by Mr. Joyce except those marked (S) which are by Mr. Skeat.

⁴⁶ Two specimens.

^{46c} Mutilated and now under original weight.

Mr. Joyce further weighed five ingots, three from the British Museum (Nos. 1905-11-16-9 to 11) and two from his own collection, and found that they weighed respectively grains 11, 133; 7, 623; 7, 462; 7444 (J); 202 (J). From this we get the following tabulated information:—

"Pagoda" Scale.

cents of a dollar	weight in oz. av. ¹⁷	
	nominal	actual approx.
$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$ (J)

"Sugarloaf" Scale.

cents of a dollar	weight in oz. av. ¹⁷	
	nominal	actual approx.
$7\frac{1}{4}$	$17\frac{1}{2}$	$\left\{ \begin{array}{l} 17\frac{1}{2} \\ 17 \\ 17 \text{ (J)} \end{array} \right.$
$12\frac{1}{2}$	28	$25\frac{1}{2}$

All the above tables of ingots and *gambar* pieces can be stated together in another way, which clearly brings out the fact that the modern Malay monetary system is based on the *kati* or Malay pound weight (of tin), and the old Dutch monetary system on the *tali* or string (of cash or units, i. e., regulated pieces of tin). It also clearly shows how the ingot tin currency in any form met the requirements of Malay commerce.

"Pagoda" Scale.

cents of a dollar	name of animal ¹⁸	corresponding weight	reference to commercial weight standards
$\frac{1}{4}$	(ingot)	1 kēping	the lowest denomination of Malay weight
$\frac{1}{2}$	ayam	2 kēping	
$\frac{3}{4}$	ayam	3 kēping	
2	$\left\{ \begin{array}{l} \text{ayam} \\ \text{buaya} \\ \text{gajah} \end{array} \right.$	$\frac{1}{2}$ kati	lower standard of Malay weight
5	$\left\{ \begin{array}{l} \text{buaya} \\ \text{ayam} \end{array} \right.$	half kati	
10	$\left\{ \begin{array}{l} \text{buaya} \\ \text{gajah} \\ \text{kurakura} \\ \text{(ingot)} \end{array} \right.$	kati	
20	$\left\{ \begin{array}{l} \text{bēlalang} \\ \text{buaya} \end{array} \right.$	double kati	
40	(ingot)	4 kati	
50	(ingot)	$\left\{ \begin{array}{l} 5 \text{ kati} \\ \text{half dollar} \end{array} \right.$	

"Sugarloaf" Scale.

cents of a dollar	name of animal	corresponding weight	reference to commercial weight standards
$1\frac{1}{4}$	$\left\{ \begin{array}{l} \text{ayam} \\ \text{gajah} \end{array} \right.$	quarter pēnjuru.	string of cash or unit of tin weight
$3\frac{1}{4}$	ayam	$\left\{ \begin{array}{l} \text{half pēnjuru} \\ \text{quarter tali} \end{array} \right.$	
$6\frac{1}{4}$	$\left\{ \begin{array}{l} \text{buaya} \\ \text{ayam} \end{array} \right.$	$\left\{ \begin{array}{l} \text{pēnjuru} \\ \text{half tali} \end{array} \right.$	
$7\frac{1}{4}$	$\left\{ \begin{array}{l} \text{(ingot)} \\ \text{bēlalang} \end{array} \right.$	$1\frac{1}{4}$ pēnjuru	
$12\frac{1}{4}$	$\left\{ \begin{array}{l} \text{(ingot)} \\ \text{ayam} \end{array} \right.$	tali	

¹⁷ See ante, p. 83.

¹⁸ Ayam, cock; buaya, crocodile; gajah, elephant; kurakura, tortoise; bēlalang, mantis.

15½	{ gajah buaya	2½ pñjuru	
18½	{ bñlalang gajah ayam (ingot)	3 pñjuru	
25	kurakura	viss double tali	} standard of Far Eastern av. weight
31½	{ kurakura buaya (ingot)	5 pñjuru 1½ viss	
37½	bñlalang	6 pñjuru 1½ viss	} great viss of commerce

One interesting point, as showing the force of commercial necessities on a people, is that we have (*ante*, p. 90) a "pagoda" ingot weighing a *tali*, and a "sugarloaf" ingot weighing a *kati*, both out of scale. This shows that the *tali* and *kati* were of such importance as standards of commercial weight that they had to be specially provided for under each method of reckoning.

There must always have been much confusion in the use of the two scales of the ingot and *gambar* pieces, unless they were not concurrent, *i. e.*, unless they were in vogue only in separate places and periods, which is not at all likely.⁴⁸ At the same time the above tables show that there was a simple and easily understood proportion between the various *gambar* pieces in circulation.

Thus, taking all the available ingot and *gambar* pieces together, we get the remarkable facts that on the "pagoda" scale there were issued, on the basis of the *kāping* or cash, a series of 10 "coins" in the proportion of—

1: 2: 3: 4^{1/2}: 8: 20: 40: 80: 160: 200.

On the "sugarloaf" scale, on the basis of ¼ pñjuru, the proportion of another series of 10 "coins" is

1: 2: 4: 5: 8: 10: 12: 16: 20: 24.

As a matter of fact, however, the bases of the two scales were, no doubt, the *kati* or lower standard of Malay av. weight for the "pagoda" scale and the *tali* or string of cash for the "sugarloaf" scale. On this assumption we can get at the minds of the issuers of the tin ingot currency and observe that they intended to make the tin pieces represent the following proportions:—That is, on the "pagoda" scale.

5: 4: 3: < 1: *kati* >: ½: ¼: ⅛

further dividing the lowest of these denominations into ¼, ⅛, 1/16, to meet surrounding commercial requirements. On the "sugarloaf" scale the proportions intended were

3: 2½: 2: 1½, 1¼ < 1: *tali* >: ¾: ½: ¼: ⅛

It is interesting to observe that the pagoda scale works out to 200 *kāping* or cash, *i. e.*, to half a dollar of 400 cash or 100 cents, and that the sugarloaf scale works out to 24 pñjuru (24 × 6¼ = 150 cents) to a dollar and a half. This gives a proportion between the pagoda and sugarloaf scales of 1: 3. But, unless there were ready means of identifying specimens, this fact would not be of any practical use for appraising the relative value of pieces, when converting those of one scale into the other.

The various species of *gambar* pieces had also a clear and readily remembered proportion between themselves. Thus, from the specimens already available we get the following proportions.

⁴⁸ See remarks above on the existence of ingots out of scale.

⁴⁹ No specimen of the 1 cent *gambar* piece is as yet available to me.

"Pagoda" Scale.

1, $\frac{1}{2}$, $\frac{1}{4}$, kaping.

Proportion ; 1 : 4 : 8.

2, 1, $\frac{1}{2}$, $\frac{1}{4}$ kati.Proportion ; 1 : 2 $\frac{1}{2}$: 5 : 10.2, 1, $\frac{1}{2}$ kati.

Proportion ; 1 : 5 : 10.

"Sugarloaf" Scale.

(1) ayam (cock).

3, 2, 1, $\frac{1}{2}$, $\frac{1}{4}$ pñjurn.

Proportion ; 1 : 2 : 4 : 8 : 12.

(2) buaya (crocodile).

5, 2 $\frac{1}{2}$, 1 pñjurn.Proportion ; 1 : 2 $\frac{1}{2}$: 5.

(3) gajah (elephant).

3, 2 $\frac{1}{2}$, $\frac{1}{4}$ pñjurn.

Proportion : 1 : 10 : 12.

(4) belalang (mantis).

6, 3, 1 $\frac{1}{2}$ (for 1 $\frac{1}{2}$) pñjurn.

Proportion ; 1 : 2 : 4.

(5) kurakura (tortoise).

5, 4, pñjurn.

Proportion ; 1 : 1 $\frac{1}{2}$.

The above considerations seem to prove beyond doubt that there were two concurrent scales in the tin currency represented by the two forms of the ingot, and the main future interest in the above statements is that they enable us to know what to look for in order to complete the information already gathered.⁴⁹

The practical use to which the *gambar* currency was put is curiously illustrated by a letter (Appendix I, No. VI.) from Mr. Laidlaw, dated 29th July 1904, in which he says that the trader Imam Haji Mat Arshat drove a "satisfactory trade" in rice in the Kinta Valley (Perak) in the "bad old days", before the introduction of British rule into the Federated Malay States, on the following basis. He sold his rice at 5 dollars the *gantang* of 4 *chupak*. He was paid in *gambar* (tin ingot) currency at 10 *kati* of tin to the dollar, which is practically the rate on which the preceding tables are based. This trader placed the same value on the small *gambar* ingots of tin (small cock, mantis, crocodile) as the tables do ; i. e., he said they were equal to a *pñjurn* of tin currency, or $\frac{1}{12}$ dollar in that currency (= 6 $\frac{1}{2}$ cents.)^{50a} He also said that a small *gambar* ingot was equal in fact to 10 *pitis*, or $\frac{1}{12}$ tin "dollar," but that he valued such ingots in his trade at 5 *pitis*, or $\frac{1}{24}$ tin "dollar," and that he sold his rice at a *chupak*, or $\frac{1}{4}$ *gantang*, for a small ingot, at the valuation of $\frac{1}{24}$ dollar. By this means he got 8 dollars worth of tin for the *gantang* of rice, whereas his price was 5 dollars the *gantang*, presumably with a further profit attached to it on its intrinsic value. He therefore made a profit on his trading of 3 points in 50 or 60% by his manipulation of the currency, without reference to what might happen to him on the actual sale of his rice. Thus was the trade made "satisfactory," and thus does this trader once again demonstrate the truth of the comment⁵⁰ that in countries where there is a currency and not money, the opportunities of illicit profit are twice as great as in a country where there is a legally fixed coinage.^{50b}

⁴⁹ We have not come to the end of the information procurable, because there is some evidence in the correspondence in Appendix I, that there was a *buaya* of account at 2 $\frac{1}{2}$ cents (pagoda scale), and other *buaya* valued at a *tali* or 12 $\frac{1}{2}$ cents and at a *kaping* (alab) or 312 $\frac{1}{2}$ cents (both sugarloaf scale).

⁵⁰ He naturally reckoned his fractional parts on the old Dutch scale.

^{50a} *Ants*, Vol. XXVI, pp. 200 f.

^{50b} The villagers he was dealing with, on the other hand, probably thought that they were making a good bargain for themselves by getting 5 *gantang* of rice for tin currency, which should have produced only 4 *gantang*. For other instances of this mutual "profit" between trader and semi-savage or savage, see *ant*, Vol. XXIX, p. 30.

One general inference here which will be found to be supported by independent argument later on, is that the British took the surrounding Malay system directly for the basis of their imported money system, while the Dutch adopted for theirs the system originally invented by the Chinese to meet their own commercial necessities in the Malay Peninsula.⁵¹

III.

Historical Examination.

1

Yule, *Hobson-Jobson*,⁵² s. v. Malacca, quotes Groeneveldt, *Chinese Annals*, p. 123, to the following effect as to Malay currency in tin in 1409 A. D.:— "In the year 1409 . . . the land was called the kingdom of Malacca (Moa-la-ka). . . . Tin is found in the mountains . . . It is cast with small blocks weighing 1 cattì 8 taels . . . ten pieces are bound together with a rattan and form a small bundle, whilst 40 pieces make a large bundle. In all their trading . . . they use these pieces instead of money."

This provides a scale

1½ kati	make	1 patah	
10 patah	"	1 tali ⁵³	= 15 kati
4 tali	"	1 kōping	= 60 "

Ante, vol. XXXI. p. 51, I have quoted two statements from Stevens, *Guide to East India Trade*, 1775, p. 127, as under:—

Jenkeeylone.		Teeopa.	
3 punchorf ⁵⁴	make 1 poot.	3 pingas	make 1 puta.
4 poot	" 1 vis.	4 putas	" 1 viss.
10 vis	" 1 capin	10 viss	" 1 capin.
8 capin	" 1 bahar.	8 capin	" 1 bahar.

And *ante*, p. 9, will be found Bowrey's statement in c. 1675, which affords the following table:—

Janselone.	
2½ puttas ⁵⁵ small	make 1 putta large
4 putta large	" 1 viece
15 viece	" 1 cupine
8 cupine	" 1 baharre of 420 lbs.

From these statements and those above made (*ante*, p. 94) as to the *gambar* or animal ingots in use about 1860, and from the standard weights for tin currency set up on the modern British and old Dutch scales, we can arrive at certain facts pertinent to the present purpose. The scale of 1409 shows 10 *tali* (bundles) of 1½ *kati* = 1 unit of 15 *kati*. The modern scales show 8 *tali* of ½ *kati* = 1 unit of 10 *kati*. The ratio of the two scales is therefore 1½ : 1. The modern standard *viss* or *bidor* = 3½ lbs.; therefore the *viss* or *bidor* of 1409 was 5½ lbs., i. e., it was the great *viss* (1½ standard *viss*). The scale of 1409 was consequently the scale of the great *viss*.

⁵¹ The British E. I. Co. made attempts to control the money of the Malay Archipelago as long ago as 1686, vide Pringle, *Consultations, Fort St. George*, Vol. IV, p. 170, quoting an agreement with the Raja of Pryaman and Tikra (Sumatra), dated 26th Jan. 1684:—"No other Europeans or Natives be authorised or allowed to have a mint or coyne or stamp any sorte of mony, whither gold or copper, tinn, or any other mettle or thing whatsoever."

⁵² See also *Miscell. Papers relating to Indo-China*, 2nd Series, I. 244.

⁵³ Or bundle; it represents on the great *viss* scale the "dollar" unit of the modern nomenclature.

⁵⁴ Read *pēngure*, *patah*, *viss*, *kōping*, *bahara*.

⁵⁵ Read *patah*, *viss*, *kōping*, *bahara*.

Reducing all the scales above mentioned to the standard of 420 lbs. to the *bahara*, or 52½ lbs. the *kōping* (*ante*, p. 90), we find that the scales of 1409 and 1725 are those of the great viss, and that all the rest were of the standard viss. This enables us to arrive at the following table:—⁵⁶

Malay Tin Currency.

Comparative Table of Scales:

Great viss scale.		Standard viss scale.					
1409	1775	1675	c 1880	Standard ingots.		Old Dutch scale.	
				British scale.			
a	a	a	a	a		a	a
1½ a = b	3 a = b	2½ a = b	[2 a = b] ⁵⁷	[2 a = b] ⁵⁸		2½ a = b	
10 b = c	4 b = c	4 b = c	4 b = c	5 b = c		4 b = c	
4 c = d	10 c = d	15 c = d	15 c = d	15 c = d		15 c = d	

Table stated in av. weight:

a = 14 oz.	a = 7 oz.	a = 5½ oz.	[a = 7 oz.] ⁵⁷	[a = 5½ oz.] ⁵⁸	a = 15½ oz.
b = 21 oz.	b = 21 oz.	b = 14 oz.	b = 14 oz.	b = 11½ oz.	b = 14 oz.
c ⁵⁹ = 13½ lbs.	c = 5½ lbs.	c = 3½ lbs.	c = 3½ lbs.	c = 3½ lbs.	c = 3½ lbs.
d = 52½ lbs.	d = 52½ lbs.	d = 52½ lbs.	d = 52½ lbs.	d = 52½ lbs.	d = 52½ lbs.

In terms of modern currency, on the standard of 420 lbs. to the *bahara*, the half-*gambar* *kōchil* (small description of model of animal) or half-*pānjuru* = 7 oz.: *pānjuru* = 14 oz.: *tampang* (*kati*) = 22½ oz.: *tali* = 28 oz.: viss = 56 oz. (3½ lbs.): great viss = 84 oz. (5½ lbs.): "dollar" = 224 oz. (14 lbs.): *kōping*⁶⁰ = 52½ lbs.

The above comparative tables supply the following important facts:—

(1) The "dollar" unit of weight (tin) is constant through the centuries at 13½ lbs. on the great viss (*bidor*) scale and at 14 lbs. on the standard viss scale. The persistence of this unit accounts for its existing use to represent in weight of tin the dollar unit of European imported silver money. The old Chinese *kati* is represented on the modern scales by the *pānjuru*, and the old Chinese *tali* (bundle) by the *tampang* (block), to which the name of *kati* has become transferred in the course of time in the Malay countries. The constant units are the *pānjuru* at 14 oz.: *tampang* (Malay *kati*) at 21-22½ oz.: *bidor* (viss) at 56 oz.: great viss⁶¹ at 84 oz.: "dollar" at 13½-14 lbs.: *kōping* at 52½ lbs.: it being borne in mind that the *bahara* of the ingots and *gambar* ingots is still 420 lbs., though the modern standard British *bahara* has been rounded off to 400 lbs.

⁵⁶ I feel justified in setting up this standard of 420 lbs. to the *bahara* by a remark in Lockyer, *Account of Trade in E. India*, 1711, the most painstaking of all the writers of the period on commercial matters. He says, p. 30, that the Malay *bahara* weighed 422 lbs. 15 oz. = c. 423 lbs. He also says that the dollar weighed 17 dwts. 1481 grs. = c. 423 grs., thus incidentally showing the cause of the standard *bahara*, for by it 1 gr. of silver money = 1 oz. of merchandise. So all that the trader had to do was to bargain as to the number of grains silver currency he was to pay per ounce of stuff. This exhibits a strong instance of commerce accommodating itself to circumstances. The standard quoted by Lockyer was long maintained, for Dilworth, *Schoolmaster's Assistant* (*Arithmetic*), 1782, p. 163, makes "pieces of 8, old plate of (i. e., old Sp. dollar) 17 dwts. 12 grs." = 420 grs.

⁵⁷ In accounts as the half *buaya*.

⁵⁸ In accounts as the half *gambar* (*buaya, ayam, Melang*) *kōchil*.

⁵⁹ This is the "dollar" unit of later times on the great viss scale = 4 viss or *bidor*.

⁶⁰ This denomination seems to have been originally the "great bundle" or *tali*, for which was afterwards substituted a slab of tin (*kōping*) as the capacity for casting improved.

⁶¹ Also (at 1½ standard viss) 70 oz.

(2) The modern *tali* or bundle is a double-*pénjuru* or half *vias* or 28 lbs., but this denomination has been subject to many fluctuations, presumably dependent on the number of units that at different times and places went to the bundle.

(3) The modern denominations of the silver money used in the Malay countries are the result of dividing the dollar unit into cents: the number of cents in each denomination representing it in the old tin currency.

(4). The tin "hat" money of the old Malay State is a direct representation of the tin currency in money, to suit the requirements of the dominating silver money introduced by Europeans.

The general historical inferences from the above considerations are that the modern silver money adopted by Europeans for the Malay States is the direct descendant of the old tin ingot currency; that this in its turn was the direct descendant of the method employed for bartering in tin, which must have been evolved out of the obvious needs of the early traders; and that the *gambor* "animal" currency was evolved out of an attempt to regulate the tin ingot currency by giving it various readily recognisable forms, which could be made to conform to definite standards.

2

Historical continuity of the tin currency in the Malay Peninsula can be further shown in an instructive manner by references in Maxwell's paper, "The Dutch in Perak," *J. R. A. S.*, Straits Branch, No. 10, relating chiefly to Dutch treaties and arrangements with native chiefs, which may be reduced to the following statements:—

p. 246. 1650. 1 *bidor* = $1\frac{1}{2}$ Sp. dollar: 1 *bahara* = 3 *pikul* = 125 *bidor* = $31\frac{1}{2}$ Sp.

dollar: 1 slab (*képing*) of tin = $62\frac{1}{2}$ *kati* = 78 lbs. Dutch.

p. 247. c. 1651. Tin sold at 50 rixdollars = 1 *bahara*.

p. 258. No date. Tin sold at 32 Sp. dollars, the *bahara*.

p. 262. 1765. Tin sold to Dutch at c. $36\frac{1}{2}$ = 125 lbs. for $11\frac{1}{2}$ Sp. dollars = 34 Sp. dollars per *bahara* of 375 lbs.: 1 slab = $56\frac{1}{2}$ *kati* = 75 lbs. Dutch.

p. 267. 1768. Tin sold to Dutch at 32 Sp. dollars per *bahara* of 428 lbs.: 1 slab = $64\frac{1}{2}$ *kati* = 85 $\frac{1}{2}$ lbs. Dutch.

p. 268. 1883. 1 *bidor* = $2\frac{1}{2}$ *kati* and hence 1 *tampang* = 1 *kati*.

Mr. Skeat has quoted to me the following data from Newbold's *Statistical Account of Malacca*, Vol. II. :—

p. 94. 1760. Tin sold at 38 Sp. dollars per *bahara* = 3 *pikul*.

p. 96. 1819. Tin sold at 40 Sp. dollars per *bahara* of 300 *kati* = 370 lbs.

p. 100. c. 1830. The *tampang* weighed $1\frac{1}{2}$ to 2 *kati*, and the *képing* or *bangka* (slab) 50 to 60 *kati*; the *kati* = $1\frac{1}{2}$ lbs.

Yule's quotation for 1409 (*ante*, p. 19) shows 60 *kati* to the *képing*.

From these statements there can be constructed for Malay-land in general the following historical table, which might be indefinitely increased:—

kati to the képing (slab).		Sp. dollars to the bahara.		lbs. to the bahara.	
Date.	No.	Date.	No.	Date.	No.
1409	60	1650	$31\frac{1}{2}$	1486 ⁶²	426 $\frac{1}{2}$
1650	$62\frac{1}{2}$	1660 ⁶³	30	1650	390

⁶² From Chinese account of Sumatra in *Miscell. Papers, Indo-China*, I., 210 giving a *bahara* of 320 *kati* taken at $1\frac{1}{2}$ lb. each.

⁶³ This was a temporary reduction by the Dutch. Tavernier (see *infra*, p. 31) writing in his *Travels*, published in 1678, says that the Malay tin in India was 14 sous (cents) a lb. Taking Bowray's statement in 1675 (*ante*, p. 89) that 420 lbs. = 1 *bahara*, then 53 $\frac{1}{2}$ dollars went to the *bahara*. Tavernier also says that the Dutch had ousted the British from the trade, at what profit to themselves, less freight and charges, can be seen, when they purchased at 32 $\frac{1}{2}$ dollars per *bahara* of 420 lbs. In Siam in 1676 tin was 45-50 dollars the *bahara*: Anderson, *England in Siam in Sixteenth Century*, p. 183. In 1673, it was said to be 30-32 dollars for cash and 40 for credit: *cc. cit.*

	kati to the kâping (slab).		Sp. dollars to the bahara.		lbs. to the bahara.
1765	56½	{ 1760 ⁶⁸	38	1675 ⁶⁹	420
		{ 1765	34	1765	375
		1770 ⁶⁸	39½		
		1775 ⁶⁷	31½	1775 ⁶⁹	405, 419, 476
1786	64½	1786	32	1786	428
				1813 ⁶⁹	476
		1819	40	1819	370
c. 1830	50-60			1830	430-475
				1835 ⁷⁰	476-485
c. 1860 ⁷¹	37½-38½	c. 1860	30	c. 1860	420
1883	37½	1883	30	1883	400

The forerunner of the modern ratios shown in the last two sets of figures can be ascertained thus. The statements of Bowrey, Stevens, Milburn and Kelly all give 8 *kâping* (slabs) to the *bahara*, from which we get the following information:—

1675—the *bahara* = 420 lbs, and the *kâping* = 36½ *kati*.

1775— " = 476 " " = 44½ "

1835— " = 485 " " = 45½ "

With this information, and assuming that the *kâping* mentioned at the other earlier date were eight to the *bahara*, the following table can be constructed:—

Date.	kati to the kâping were	lbs. in the bahara were	kati to the kâping should have been
1650	62½	390	36½
1765	56½	375	35
1780	64½	428	40½

If then the tin was paid for by the Dutch in dollars per *bahara*, the difference between the number of *kati* reckoned to the *kâping* by agreement and the true number would represent the profit made by manipulating the currency, which would in the instances quoted above be about 33 per cent. in favour of the Dutch as against the native chiefs. This argues that the true silver monetary ratio between the *kati* and the *kâping* on a *bahara* of 375-475 lbs. has been in all European times 35 : 1 to 40 : 1, but the tables show that the native idea of the ratio in tin currency was 50 : 1 to 60 : 1. The old Dutch traders and the commercial authorities were thus able to take advantage of native notions of currency to profit largely when assessing payments for tin weighed out to them in terms of silver money.

⁶⁸ From Bowrey's statement, *ante*, p. 89.

⁶⁹ There was a ratio of 32 dollars to the *bahara* some time between 1660 and 1765.

⁷⁰ Abbé Baynal, quoted by Yule, *Holsten-Johnson*, s. v. Calay, says:—[The Dutch in Siam] received in return calin (tin) at 70 lires the 100 weight." Read *cut* = *pitul*; *lires* = *franc* = ½ dollar; *bahara* = 3 *pitul* of 1½ *cut*.:—and the statement gives 39½ dollars the *bahara*.

⁷¹ Stevens' *Guide to E. I. Trade*, p. 87.

⁷² From Stevens' statement, *ante*, p. 87. But on his p. 113 he also makes it 419 lbs. and p. 127 405 lbs., both at Malacca.

⁷³ Milburn, *Commerce*, II., p. 291, but possibly he is copying Forrest, *Voyage to Maryni Archipelago*, 1763 and Stevens, *Guide to E. I. Trade*, 1775, jointly with improved information. Forrest gives 36-39 dollars per *bahara* of 400 lbs.

⁷⁴ Kelly, *Cambist*, I., pp. 108, 121, who may be relied on, partly supports Milburn.

⁷⁵ The last two dates represent respectively the standard for tin currency set up, *ante*, p. 20, and the modern British standards, and are added for comparison. A local variation is quaintly reported by Kelly, *Cambist*, I. 100, s. v. Malacca:—A *kâping* [slab] of tin contains 15 *bider* [bider] or 30 *tampeng*. It weighs 37½ lbs. Dutch troy or 40 lbs. 11 oz. av: thus giving a *bahara* of only 325½ lbs.

3.

The information gathered by Mr. Skeat in the various districts and States of the Malay Peninsula affords another important historical deduction. The scales of the tin currency prevalent on the East Coast, that is, away from European influence until quite recently, conformed to the old Dutch scale, showing that that scale was based on the old tin currency systems of the Peninsula. The scales of the tin currency now prevalent on the West Coast, long subject to European influences, conform to the introduced European monetary scale of 1000 cash (Portuguese *pese*) to the dollar.

The old Dutch reckoning was:—

25 cash (<i>pese</i>)	make	1 <i>këndəri</i> (silver).
2 <i>këndəri</i>	"	1 <i>tali</i> .
8 <i>tali</i>	"	1 dollar of 100 <i>doits</i> (cents).

400 cash to the dollar.

The East Coast Malays still reckon on this system, but they make scale 4 *këndəri* to the *tali*,⁷² and vary the number of cash to the *këndəri* locally. On this explanation, a comparative table of reckoning in the Eastern Malay States can be readily made out from Mr. Skeat's notes, showing the descent of the old Dutch scale.

East Coast Currency System.

State or District.	Number of cash ⁷³ to <i>këndəri</i> .	Number of cash to dollar. ⁷⁴
Old Dutch	25	400 ⁷⁵
Kelantan	15	480
Patan ⁷⁶		
Jering present }	20 }	640 }
" former }	15 }	480 }
Teluban present }	12 }	384 }
" former }	10 }	320 }
Ligeh	10	320
Trengganu	10	320
Patalung ⁷⁷	12	384

Mr. Skeat also quotes in his notes Klinkert, *Nieuw Maleisch-Nederlandsch Woordenboek*, 1893, which gives *s.v. tali*, the following scale⁷⁸ of 800 cash to the dollar, thus:—

75 <i>pitis</i> (cash)	make	1 <i>tali</i> .
4 <i>tali</i>	"	1 guilder (<i>jampal</i>). ⁷⁹
2 guilder	"	1 dollar.

600 cash to the dollar

The actual origin of the existing European scale of 400 cash to the dollar can be ascertained from Marsden's *Sumatra*, 1811, pp. 171-2:—"Spanish dollars are everywhere current and accounts are kept in dollars, *suku* (imaginary quarter dollars),⁸⁰ and *kepeng* or copper cash,

⁷² Called *kupang* in Kelantan, E. Coast, and synonymously *kupang* and *tali* in Negri Sembilan, W. Coast.

⁷³ Arrived at by multiplying the number of cash to the *këndəri* by 32 (4 *këndəri* by 8 *tali* = 1 dollar).

⁷⁴ Called *pitis* and *képang* in Patani and Patalung, and *tra* (stamp) in Setul; *képang* in Kedah.

⁷⁵ 25 cash by 16 *këndəri*=1 dollar. This scale is added for comparison. The British scale is also worked out to 400 cash to the dollar.

⁷⁶ Differences stated to be due to changes in the price of tin.

⁷⁷ Siamese territory beyond Singora.

⁷⁸ Marsden's scale (1811) for Sumatra is 50 cash to the *tali*: 8 *tali* to the dollar=400 cash to the dollar. Klinkert's scale seems to show the depreciation of cash between 1811 and 1893.

⁷⁹ In modern terminology "money of account."

of which 400 go to the dollar. Besides these there are silver *fanam*, single, double and treble (the latter called *tali*),⁵⁰ coined at Madras: 24 *fanam* or 8 *tali* being equal to the Spanish dollar, which is always valued in the English Settlements at 5 shillings sterling. Silver rupees (*rupiah*) have occasionally been struck in Bengal, for the use of the Settlements on the coast of Sumatra, but not in sufficient quantities to become a general currency. In the year 1786, the Company contracted with the late Mr. Boulton of Soho [London] for a copper coinage, the proportions of which I was desired to adjust. The same system, with many improvements suggested by Mr. Charles Wilkins,⁵¹ has since been extended to the three Presidencies of India. At Achin, small and thin gold and silver coins were formerly struck and still are current, but I have not seen any of the pieces that bore the appearance of modern coinage, nor am I aware that this right of sovereignty is exercised by any other power in the Island."

This statement in Marsden's *Sumatra* shows that in 1811 he was working on the Dutch scale, and provides an interesting comparative table with what is nowadays understood as "the old Dutch" scale.

Marsden's Scale.

16½ cash	make 1 fanam.
2 fanam	" 1 double fanam.
1½ double fanam	" 1 tali.
2 tali	" 1 suku.
4 suku	" 1 dollar.

400 cash to the dollar.

Old Dutch Scale.

4 cash	make 1 duit.
2½ duit	" 1 dubbeltje.
2½ dubbeltje	" 1 kēndēri.
2 kēndēri	" 1 tali.
2 tali	" 1 suku.
4 suku	" 1 dollar.

400 cash to the dollar.

The statement tends to show that the modern European System of 400 cash to the dollar arose out of the requirements of Europeans in Sumatra in dealing with the Malays, and was imported thence to the Malay Peninsula, possibly by Sir Stamford Raffles about 1819, though apparently Marsden was working on notions of money current both in Sumatra and Malacca in his time.

There is a curious reference to the "old Dutch Scale" of 400 cents to the dollar in the following quotation from Tavernier's *Travels*, English ed., 1678, Vol. I, Pt. II., p. 6 f., showing that it, or something like it, existed long before Marsden's time:—

"An Account of the Money of Asia."

The money of the King of Cheda and Pera [Kedah and Perak]. This money is of Tin, and is coined by the king of Cheda and Pera. He coins no other money than Tin. Some year since he found out several Mines, which was a great prejudice to the English. For the Hollanders and their merchants buy it, and vend it over all Asia. Formerly the English brought it out of England, and furnished great part of Asia, where they consumed a vast quantity; they carried it also into all the Territories of the great Mogul, as also into Persia and Arabia; for all their Dishes are of Copper, which they cause to be tinned over every month. Among the meaner sort of people, there is little to be seen but this Tin-money, and the Shells called Cori (cowrey); Figs. 1 and 2 are of that great piece of Tin, which weighs an ounce and a half,⁵² and in that Country goes for the value of two of our Sous.⁵³ But in regard that Tin is there at 14 Sous a pound, this is not worth above one Sous and three Deneers. This piece of Tin is only thick in the sides, the middle being as thin as paper.

⁵⁰ See *infra*, p. 107, n. 6, as to the transfer of the term *tali* for half a rupee, or four to the dollar, in modern Indian broker's slang.

⁵¹ Librarian of the East India Company.

⁵² The old French *poids de marc* or pound of 16 oz. = 7555 grs. Eng. as against the old Eng. lb. which = 7000 grs.

⁵³ The old French *livre* (called also the *franc*) was divided into 20 *sous* of 12 *deniers* each, so a *son* was roughly an English half penny or 1 cent of a dollar.

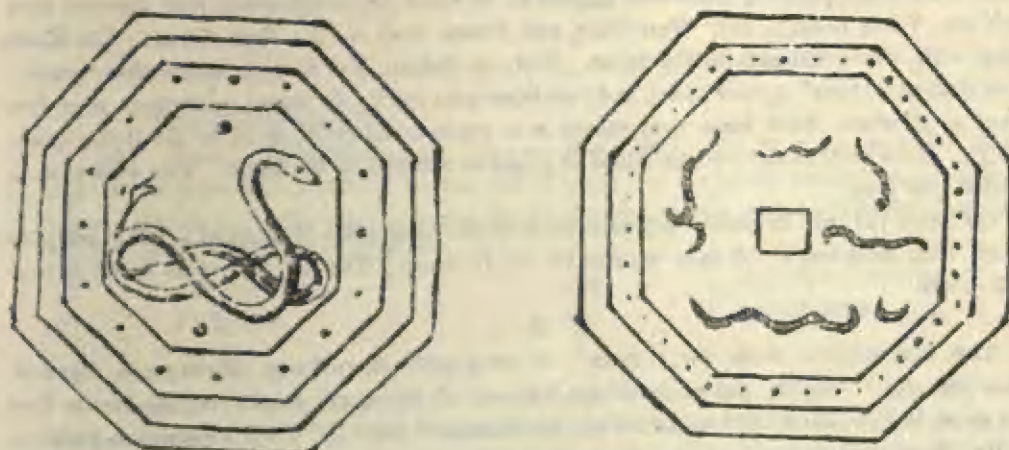
Figs. 3 and 4 are of a piece that goes at the value of four Deniers.⁸⁵

Figs. 5 and 6 are three Shells (cowries), whereof they give fifty for the little piece of Tin."

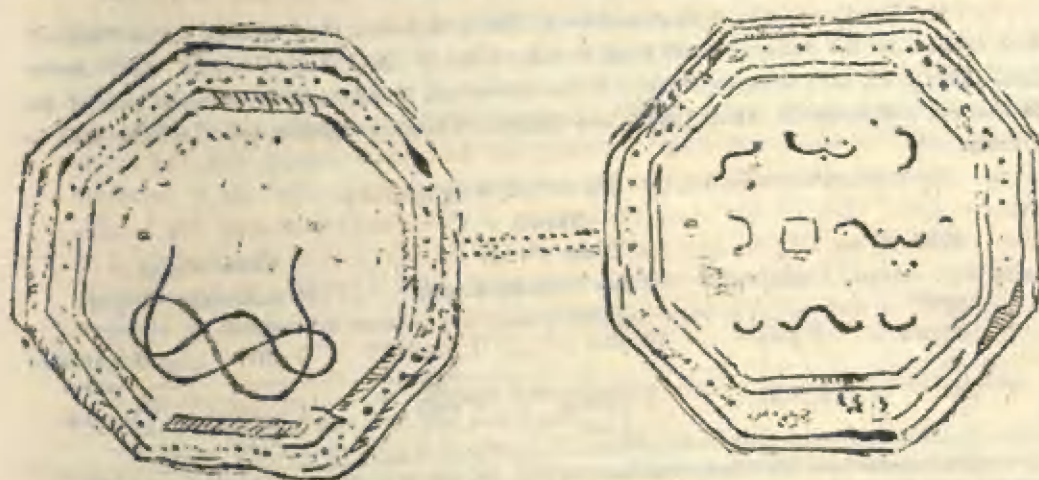
Plate marked to face p. 7 of Tavernier's *Travels*.

The money of the king of Bada [for Cheda] and Pera [Kedah and Perak]

("That great piece of tin which weighs an ounce and a half")⁸⁶



All that Millies could find of this coin 200 years later in Paris, when it had become much worn, is given below.⁸⁷ It is an indication of the liberties taken by Tavernier's engraver.



Tavernier's statement therefore exhibits an instructive scale.

50 cowries	=	1 little piece (<i>kepeng, pitis, cash</i>).
3 little pieces (cash)	=	1 sou (cent).
100 sou (cent)	=	1 dollar.

15000^{88a} cowries or 300 cash to the dollar.

⁸⁵ Figs. 3 and 4 of Tavernier's plate show a regularly minted coin with an Arabic inscription on the reverse. Its value of 4 deniers shows that it was $\frac{1}{4}$ sou or cent; i. e., it was a *kepeng, pitis* or cash. Millies, *Recherches sur les Monnaies Malaises*, p. 132, thinks he can read the date 1041 A. H. on this coin = A. D. 1631.

⁸⁶ The misfortunes that have happened to Tavernier's plates of Malay money at the hands of subsequent writers are detailed on p. 4 of Millies, *Recherches sur les Monnaies Malaises*, 1871.

⁸⁷ *Op. cit.*, p. 130 and Pl. XXII., No. 230.

^{88a} This gives 7500 cowries to the rupee, a fair average number; see *ante*, Vol. XXVI., pp. 230 ff.

Remembering that this is the report of a French traveller on Malayan currency as understood in India in the 17th century, one finds in it a clear reference to the old Dutch scale of 400 cash to the dollar.⁹³

4.

A transition stage between the two scales of 400 and 1000 cash to the dollar respectively, perhaps due to surrounding influences, appears to be found in the following facts reported from the Kinta Valley (*ante*, p. 96), West Coast, and Patani town on the East Coast. The Kinta Valley scale shows 800 cash to the dollar. Now, in Patani Mr. Skeat tells me that "cash" were cast in "trees" (*pokok pitis*), and that those with the Raja's stamp on the top were most valued as genuine. Such trees were valued at a *këndëri*, $3\frac{1}{2}$ cents, or 32 to the dollar (*ante*, p. 101). Each cash on the tree was valued at $\frac{1}{2}$ cent or 800 cash to the dollar. This works out to 25 cash per tree.

On Plate VII. will be found a reproduction from the Cambridge Museum of a half *pokok pitis* or cash tree, consisting of 13 cash without the Raja's stamp. The cash bear date A. H. 1314 = A. D. 1896.

5.

The alternative term for "cash" in many parts is still *peso*, Portuguese, Spanish, Italian, etc., for "weight," and used for the low unit of monetary weight, varying in the East from about 1000 to about 1600 to the dollar; by standard 1000.⁹⁴ From information gathered by Mr. Skeat and other European observers, a table can be made out showing the effect of European commerce and influence on the monetary currency scales of the Peninsula. The evidence for the West Coast currency system is as follows:—

(1). Mr. Skeat's notes for Kedah and Setul, North of Kedah, show 40 cash to the *këndëri*⁹⁵ and 32 *këndëri* to the dollar = 1280 cash to the dollar.⁹⁶ And Logan, *Journ. Ind. Archipelago*, 1851, p. 58, says the same thing: "The native coin is the *tra*, a small round piece of tin with a hole in the centre, of which 160 make a *tali*, and 8 *tali* are worth a dollar" = 1280 cash to the dollar.

(2). Mr. Laidlaw's information provides the following scales:

Telok Anson.			Perak.			Kinta Valley.		
			Lower Perak.					
62½ duit	make	1 pênjuru	10 duit	make	1 pitis ⁹⁷	10 duit	make	1 pitis
ayam ⁹⁸			ayam			ayam		
2 pênjuru	"	1 piak ⁹⁹	10 pitis	"	1 gambar ¹⁰⁰	5 pitis	"	1 gambar
					ayam			ayam
2 piak	"	1 suku	4 gambar	"	1 suku	4 gambar	"	1 suku
			ayam			ayam		

⁹³ Other inferences from this valuable statement by Tavernier will be found in the appropriate places.

⁹⁴ *Peso = rris*, of which 1000 to 1200 went to the *milrei* or dollar unit. Hence the use of the term for "cash." The actual value of the *milrei* was always uncertain.

⁹⁵ Reckoned as 4 *tra* (cash) to the duit, 10 *duit* to the *këndëri*. Millies *Recherches sur les Monnaies Malaises*, p. 130, quotes Beaulieu, *Relation de Voyages*, 1698, II. 38, who says 32 *tra* make a dollar, thus transferring the expression *tra* from "cash" to the *këndëri*.

⁹⁶ This makes the *këndëri* of this scale half a pênjuru or $3\frac{1}{2}$ cents = $\frac{1}{4}$ dollar. Usually the *këndëri* = pênjuru 64 cents = $\frac{1}{2}$ dollar. Mr. Skeat quotes Deane, *Descriptive Dict. of British Malaya*, 1894, s.v. *tali*, who has 160 *tra* = 1 *tali* = 1280 cash to the dollar.

⁹⁷ A coin. "cash with the cock," called also *képang* and *duit*.

⁹⁸ Or *tali*.

⁹⁹ Ordinarily *pitis* means cash, 400 to the dollar: here it is 160 to the dollar.

¹⁰⁰ Tin ingot in the form of a cock: the small "cock" ingot = 1 pênjuru, 16 to the dollar

2 suku make 1 jampal	2 suku make 1 jampal	2 suku make 1 jampal
2 jampal " 1 dollar	2 jampal " 1 dollar	2 jampal " 1 dollar
1000 duit ayam (cash) to the dollar.	1600 duit ayam to the dollar.	800 duit ayam to the dollar ⁹⁸

(3). Maxwell, *Man. of the Malay Language*, 1882, p. 142, gives the following scale for Perak:

36 duit ayam ⁹⁷ (copper)	make	1 wang (silver) ⁹⁸
7 wang	"	1 suku
4 suku	"	1 dollar

1008 cash to the dollar.

(4). Wilson, *Documents of the Burmese War*, 1827, App. 26, p. 61, says:—"The tical⁹⁹ and tin pice were the currency in Tavai and Mergui, but the former has been superseded by the rupee. The rates for the rupee and pice may be expected to vary, but the following was in use at the date of our authorities (1826).¹⁰⁰

12 small pice	make	1 large one or kebean.
88 kebean	"	1 Spanish dollar.

1056 pice (cash) to the dollar.

"Small pice" here means cash, the Anglo-Indian term, *pice* (*paiza*), being then commonly used on the Coast, from the "*pice*" coined by the E. I. Company at Penang in tin for the use of the Malay Settlements. *Kebean* is obviously *képing*, used as an alternative for *pitis*, in the same sense as Mr. Laidlaw's informant used that term for a Dutch *duit* or cent.

There is also further instructive proof of the interdependence of the native and European money all down the Coast. Chalmers, *Hist. of Currency in Brit. Colonies*, p. 382 ff., says that in 1887 the E. I. Company commenced a coinage in Penang,¹ which the Indian authorities proved very tenacious in retaining as long as they had control of the Straits Settlements up to 1867. This coinage consisted in the days of Wilson of half and quarter rupees and copper cents, half and quarter cents, and tin "*pice*" of the value of a cent. The rupee was the equivalent of the Dutch *guilder*, and so it was half a dollar. This means that they coined on the scale of 400 cash to the dollar. It is obvious, therefore, that Wilson's *kebean* referred to the scale of 400 cash to the dollar. It is obvious, therefore, that Wilson's *kebean* referred to the scale of 400 cash to the dollar. It is obvious, therefore, that Wilson's *kebean* referred to the scale of 400 cash to the dollar. It is obvious, therefore, that Wilson's *kebean* referred to the scale of 400 cash to the dollar. His other statements of 88 and 77¹/₂ *kebean*, i. e., 1056 and 930 cash to the dollar, merely represent the discounts the local native merchants or money-changers tried to get as their profit by manipulating the currency.

⁹⁸ The difference here shows the difference in the value of tin on the coast and up-country in Perak.

⁹⁷ Called in Salangor, *duit jagoh*. Jav. *jago*, a cock.

⁹⁸ Chalmers, *Hist. of Currency in Brit. Colonies*, 1893, p. 383, quotes in a footnote a letter from Maxwell. "The *wang* was a Netherlands-Indian *stijver* = 4 duit, and the *wang bahara* was the European *stijver* = 5 duit. Twenty-two years ago (say 1870), when I was Magistrate of Malacca, I often heard the expression, *wang bahara*, used to signify 2½ cents of a dollar, though there was no corresponding coin. This is similar to the use of the word *lapan* (*ku-pang*) in Penang. This expression is still in use."

⁹⁹ Siamese silver coin, representing the old Indian *tanka*, whence came also the rupee.

¹⁰⁰ This is a point that the student should always bear in mind when appraising a traveller's or "authority's" statement: e. g., Bowrey, loc. cit., puts the *palah* at 3d. Eng. = 60 Sp. dollars to the *bahara*. But p. 184 he says tin was reckoned at 28 dollars to the *bahara* "ready money," i. e., for immediate delivery, but 40 dollars the *bahara* "upon truck," i. e., for future delivery.

¹ Dr. Hanitsch, *J.R.A.S. Straits Branch*, No. 39, p. 199, shows copper pice from Penang minted by the E. I. Co., dated 1798 and 1804, and superscribed 2, 3 and 4 *képing*, i. e., ½ and 1 cent. On p. 194 he shows rupees, half rupees in silver, *stauvers* and half *stauvers*, *duits* in copper, and *duits* in lead, issued by the E. I. Co. for Malacca in the years 1811-1816.

^{1a} See para. next but one below.

Through all this, the influence of the E. I. Co.'s coinage for the Straits Settlements can be perceived. It had another curious effect along the Coast. The money the Company established was on the Indian scale of rupees of 16 *annas* of 12 *pie*, i.e., 192 *pie* to the rupee. Between 1786 and 1825, Malacca had an alternating history as a possession of the Dutch and British. It was restored to the Dutch in 1818 and finally handed over to the E. I. Co. in 1825, when Kelly (*Cambist*, 1835, I., p. 108) reports that "accounts are kept in rix dollars of 8 *schilling* or 48 *stiver*; this is subdivided into 4 *doit*." Now this statement makes 192 *doit* to the dollar of account. That is, the local people managed to make their accounts conform to the new money by the simple process of doubling its value on paper, and thus to stick to the old ideas and scale of 400 cash to the dollar, at a discount.

We have also an echo of this in the actual coinages. Dr. Hanitsch, *op. cit.*, p. 197, quotes specimens of a copper coin struck in Batavia with the Dutch E. I. Co.'s coins and dated 1802 and 1815-24. One of them (and perhaps two) was issued during the British occupation of Java (1811-16). These coins bear the figures $\frac{1}{8}$ and 5, showing that they were $\frac{1}{8}$ of something and 5 of something else. The figures $\frac{1}{8}$ no doubt referred to the 16 annas in the rupee, which make the coin equal to 5 "pice" (*képing*). This gives 80 pice to the rupee, though in point of fact, as the text shows, *képing* ran at that time 40 to the Madras rupee or half dollar. It would appear, therefore, on this argument, that the value of the money was doubled in the coinage as well as on paper, in order to stick to the old ideas. This was the fact, because the coins in question were for currency in Achin as *kupang* or 5 *duit* (*képing*) pieces. The Achin *kupang* was at that date $\frac{1}{4}$ of a *pardao* or dollar of 4 s. 8 d., i. e., double of a rupee of 2 s. 4 d. All this means that the familiar Indian coinage was adapted to the habits of Sumatra by doubling the value of the denominations, the anna or $\frac{1}{4}$ rupee being exactly half the Achin *kupang* or $\frac{1}{8}$ dollar.²

How the rate of 88 *képing* to the dollar became fixed is brought out in an interesting manner (*op. cit.*, p. 56), thus. Wilson says, quoting the *Government Gazette*, 2 March 1826: "The Tavai (Tavoy) miner smelts the ore immediately on his return to town (from the tin mines), and coins those sorts of pice (cash) which are current in the bazaar. Of these 1546^{2a} make one pikul of Pinang—allow 1 $\frac{1}{2}$ for wastage—so that, if the average price of the tin of the Coast be 20 Sp. dollars per pikul, we shall have 38 $\frac{1}{2}$ pices current for the value of one *sicca* rupee,³ which is very nearly what it was once valued at in Tavai, viz., 40 pices. The established rate at present is 44 pices for one rupee, whether at Madras or *sicca* (i. e., Bengal standard), although the bazaar people only give 40 pices for a Madras rupee, if allowed their option; 44 pices for a Madras rupee seems to be above the intrinsic value of the metal (in terms of the rupee)."

There is, therefore, here an exceedingly interesting proof of the spread of the tin currency along the Western Coast of the Malay Peninsula and its consistency and persistence over the whole country, as Mr. Laidlaw's information gives 80 *képing* to the dollar in c. 1860 and Wilson's 88 *képing* in 1826.

² For proof, see Appendix VI.

^{2a} The official E. I. Co.'s rate was 1600 to the dollar (Chalmer's *Hist. of Currency in Brit. Colonies*, p. 362 f.). The difference here means the local discount.

³ I. e., 77 $\frac{1}{2}$ cash to the dollar at 2 rupees to the dollar, giving a ratio of tin to silver at c. 6:1. Wilson's 88 *keban* to the dollar gives a ratio of c. 6 $\frac{1}{2}$ to 1. Chalmer's *loc. cit.* shows that the ratios then varied at Penang from 6 $\frac{1}{2}$:1 to 5:1. Milburn, *Oriental Commerce*, 1813, Vol. II, p. 300, has a statement which makes the ratio 4 $\frac{1}{2}$:1. "The current pice are coined on the island, being pieces of tin, nearly the size of an English penny. They have the [E. I.] Company's mark on one side and are flat on the other; 100 of them ought to contain 4 $\frac{1}{2}$ castles of pure tin." At p. 316, Milburn makes the proportion 8:1 at Selangor alternatively 6 $\frac{1}{2}$:1 according to Kelly, *Cambist*, 1835, Vol. I., p. 115.

⁴ This statement affords a strong instance of the necessity of referring all mercantile statements of value to a general standard.

(5). Mr. Skeat has a note (showing the spread of European influence Eastwards) that the old Singora (E. Coast) currency was reckoned 10 cash to the 10 *képang* piece, 100 cash to the *këndéri*, 32 *këndéri* to the dollar: 3200 cash to the dollar. This scale is clearly that given by Mr. Laidlaw for Perak in 1860: 10 cash = 10 *pitis* = 1 *këndéri* (*pénjuru*), but 16 *këndéri* to the dollar. The Singora ratio of "cash" to the dollar was stated to depend on the quantity of Dutch cash in the country from time to time.⁵

The accuracy of this statement is attested by some remarks in Raffles' *Java*, 1830, Vol. II., App., note to p. 11, and pp. clxi, clxii (table), from which a scale can be made out thus:—

200 pichis (cash)	make	1 dubbeltje or wang.
24 wang	"	1 dollar.

4800 pichis to the dollar.

Raffles' observations also show the great fluctuation of various dollars in terms of *pichis*: e. g., he rates the Sp. dollar at 28 *wang* = 5600 *pichis* to the dollar, and the rixdollar (of account) at a discount of 8% off the ordinary dollar, giving 4500 *pichis* to the dollar.

Something of the same kind must have always been going on in the countries East of India. Under date, 1567, Caesar Frederick (*Hakluyt*, Macleliose ed., Vol. V., 491: *Purchas*, Macleliose ed., X 131) says:—"The current money that is in this city [Pegu] and throughout all this kingdom is called Gansa or Ganzs, which is made of Copper and leade . . . with this money Ganzs, you may buy gold or silver, Rabies or muske and other things. For there is no other money current among them, and Golde, silver and other marchandize are at one time dearer than another, as all things be. This Ganzs goeth by weight of Byze [pla.], and this name of Byza goeth for ye accompt of the weight, and commonly a Byza of a Ganzs is worth (after our accompt) halfe a ducat [dollar] little more or lesse: and albeit that gold and silver is more or lesse in price, yet the Byza never changeth. Every Byza maketh a hundredth Ganzs of weight, and so the number of the money is the Byza." "Byza" (*viss*) is here clearly half a dollar.⁶

On his return from Pegu to India (p. 437), Caesar Frederick landed at the Island of Sondipa (Sandwip) near Chittagong, and took in provisions, buying, as he was told at an exorbitant rate, "great fat hennes for a Bizze apiece, which is at the most a pennie;" i. e., a *viss* weight of some coin or currency (perhaps cowries) was worth a penny according to Caesar Frederick's translator, or say $\frac{1}{16}$ to $\frac{1}{10}$ of the "byza" of Pegu.

Ralph Fitch, who was in Pegu in c. 1585 (*Hakluyt*, Macleliose ed., V. 492: *Purchas*, Macleliose ed., X. 192: *Ralph Fitch*, ed. Ryley, 1894, p. 166), says, while using terms which are suspiciously the same as Caesar Frederick's, that "commonly this biza after our account is worth about half a crowne or something less:" i. e., the "biza" was half a dollar of account usually taken formerly at five shillings English.⁷ Therefore, Caesar Frederick's "bizze" at Sondipa was $\frac{1}{10}$ of the "byza" of Pegu. All this supplies an alternative scale:—

⁵ For reasons for the depreciation of "cash" from time to time, see *ante*, Vol. XXVI., pp. 222 f.

⁶ The (*āṭ*) was half a *viss* and to this day *āṭ* in broker's slang means an eight-anna piece or half rupee (or quarter dollar).

⁷ A century later than Caesar Frederick's day, the value of bell-metal in Burma had gone down 50% at any rate temporarily, for Mr. William Foster has given me the following quotations from contemporary MS. documents. The President and Council at Serat, wrote to the E. I. Co., 25 Jan. 1650 (O. C. Dup. 2147):—"They enclosed certain accounts relating to the recent Pegu Voyage" which accounts being kept in *vists* [*viss*] of gance (bell-metal), you may please to take notice (if it should not be so express in the accounts) that each *vist* (*viss*) is nearest 16d sterling." That is, the price of bell-metal had fallen from 2s. 6d. to 1s. 4d. per *viss* between 1567 and 1650, a statement supported by the generalisations of Sangermano about 1790 (*infra*, p. 122, n. 63).

On the 11 Feb. 1648, Thomas Breton and William Potter, E. I. Co.'s servants, wrote from Pegu to Fort St. George:—"Such is the cruelty of these people that, seeing us in necessity of a boat, they will not be hired to furnish us for less than 500 *uast* [*viss*], for *viss*." Taking then the *viss* at 1s. 4d. or thereabouts, the price demanded for a cargo-boat was some 233 *Rs.*, which would not be unlikely at that time.

24 cash	make	1 ganza.	30 cash	make	1 ganza.
100 ganza	"	1 byza.	100 ganza	"	1 byza.
2 byza	"	1 ducat (dollar).	2 byza	"	1 ducat.

4800 cash to the dollar.

6000 cash to the dollar.

Again, William Barrett, Consul at Aleppo, writing in 1584, the last year of his life, on money and measures in the East, says (*Hakluyt*, Maclehoze ed., VI. 21 f.) of Malacca:—"For the merchandise bought and sold in the citie they reckon at so much the barre, which barre is of divers sorts, great and small, according to the ancient custome of the said citie and diversitie of the goods . . . The measures of Malacca are as the measures of Goa . . . For the money of Malacca, the least money current is of tinne stamped with the armes of Portugall and 12 of these make a Chazza. The Chazza is also of tinne with the said armes, and 2 of these make a challaine. The Challaine is of tinne with the said armes and 400 of these make a tanga of Goa good money, but not stamped in Malacca. There is also a sort of silver money, which they call Patachines [rix-dollar or dollar of account], and is worth 6 tangas of good money, which is 360 reyes. There is also a kind of money called crusado stamped with the armes of Portugall and is worth 6 tangas of good money . . . The rials of 8 they call Pardaos de Reales [dollar] and are worth 7 tangas of good money* (420 reyes)."

Read chazza=caixa=cash; challaine=calaim=calin=*kalang* (tin coin)=*kāping*; and this statement supplies the following table:—

12 small cash	make	1 cash
2 cash	"	1 kēping
40 kēping	"	1 tanga
7 tanga	"	1 dollar

6720 cash to the dollar (for 6400).

On the information above detailed, the following table of cash to the dollar can be made out:—

West Coast Currency System.

Old Dutch ⁹	62½	pese	by 16 kēnduri ¹⁰	= 1000 cash to the dollar.
Kedah	40	tra	by 32 "	= 1280
Setul	40	pitis	by 32 "	= 1280
Denys' Dict.	40	tra	by 32 "	= 1280

Perak.

Telok Anson	62½	duit ayam	by 16 pēnjura ¹⁰	= 1000
Lower Perak	100	"	by 16 "	= 1600
Kinta Valley	50	"	by 16 "	= 800
Maxwell, Man.	36	"	by 28 wang	= 1008
Tavoy and Mergai	12	pitis	by 88 kēping ¹⁰	= 1056 ¹¹
Old Singora	100	"	by 32 kēnduri	= 3200

The origin of the system of 1000 cash or thereabouts to the dollar can be traced even more satisfactorily than that of 400 cash to the dollar. Denys, *Descriptive Dict. of British*

⁹ This statement is interesting as making Albuquerque's *crusado* = 6/7 dollar, and the Goa *pardao* in the 16th century to equal a dollar. Taking the Goa *tanga* (nominally a *tanka*, i. e., rupee or *nickal*) as the real upper unit of Goa money, then the remarkable likeness of Barrett's statement in 1584 to Wilson's (*ante*, p. 105) in 1826 comes out.

¹⁰ Shown here for comparison.

¹¹ This scale is really that of 8 *talī* to the dollar, with *kēnduri*=*pēnjura*, and reckoned 2 or 4 to the *talī*.

¹² For 1200.

Malaya, s. v. money, states that Castanheda, Vol. II., says:—As there was no money in Malacca except that of the Moors, the Governor-General (Albuquerque) ordered (1510) some to be coined, not only that he might extinguish the Moorish coin,¹³ but also in order that a coin might be struck with the stamp and arms of his royal master. Also, taking on this subject the opinion of the Gentile Chins¹⁴ and other honorable men, dwellers in the city (of Malacca), he commanded forthwith that a tin coinage should be struck. Of the one small coin called *caixa* (cash) he ordered two to be made into one, to which he gave the name *dinheiro*. He struck another coin, which he named *soldo*, consisting of 10 *dinheiro*, and a third which he called the *bastardo*, consisting of 10 *soldo*. As there existed no coin of gold or of silver, for the merchants made their sales and purchases by weighing the precious metals, the Governor-General resolved, with the advice of the persons above-mentioned, to coin gold and silver money. To the gold coin he gave the name of *catholico*, and it weighed 1000 *reis*, and to the silver that of *malaque*. Both were of the purest metal that could be smelted.¹⁵

From this statement it can be deduced that the *catholico* and *malaque* represented the *milrei* or dollar of 1000 *reis* in gold and silver respectively, and that the *caixa* or cash equalled the *reis*. We can further construct a table which shows the relationship of the modern dollar and its parts to the Portuguese coinage in the Malay Peninsula, which was obviously based on the coinage invented by the Chinese to suit their commercial dealings with the Malays.

Albuquerque's Portuguese Coinage.

2 caixa (cash)	make	1 dinheiro
10 dinheiro	"	1 soldo
10 soldo	"	1 bastardo
5 bastardo	"	{ 1 malaque (silver, 416 grs.) 1 catholico (gold, 26 grs.) ¹⁵

1000 cash to the dollar.

Therefore:—

	Cash	Cents of the British dollar.
caixa	1	1/10
dinheiro	2	1/5
soldo	20	2
bastardo	200	20
malaque ^{16a}	1000	100

¹³ Malay tin money was found by Pyriard de Laval (*Hak. Soc. ed. of Voyage*, p. 235) in the Maldives in 1603 and according to his editor, Gray, it existed before the days of the Portuguese. Under the names of *calain* and *calin* (*kalang*, tin) the coins were worth 100 cash or half one of Albuquerque's *bastardo* (see below).

¹⁴ Cheling, Kaling, Kling, that is Tri-Kalinga, Telinga; Hindus from the Coromandel Coast of India. These Hindus were at first ordinarily known to Europeans as Gentiles, Gentus, through Portuguese, *gentio*, a heathen. See ante, Vol. XXX., p. 850.

¹⁵ Birch, *Commentaries of Albuquerque*, Hak. Soc., Vol. II., pp. 128 ff.; III., p. 41, gives an account of Albuquerque's coinage in Goa in 1510, and in Vol. III., pp. 138 ff. there is an elaborate account of his coinage at Malacca in 1511. See also Hanitch, *J. E. A. S., S. B.*, No. 39, *Collection of Coins from Malacca, Singapore*, 1903, p. 153 ff.; *Dancer's Portuguese in India*, Vol. I., p. 250.

¹⁶ Assuming the ratio of gold to silver to be 1: 16.

^{16a} Birch, *op. cit.*, vol. III., p. 140n., makes out tables of Albuquerque's coinage which are not quite the same as mine, but I think he has misinterpreted the text. In the *Commentaries*, *malaque* appears as *malaquese*. Dr. Hanitch *op. cit.*, loc. cit., shows some coins in the Raffles Museum, Singapore, which are probably of Albuquerque's minting. In *op. cit.*, No. 44, pp. 213 ff. he shows some Portuguese imitation of Malay tin ingots cast by Albuquerque or soon after his time (see ante, p. 92), which weighed 571, 642½ and 694½ grs. They represent in fact Albuquerque's *bastardo*, or ¼ dollar. Dr. Hanitch also shows, *op. cit.*, loc. cit., two smaller contemporary tin coins found in Malacca at the same time, inscribed *nostra* (s) *spes unica*, and bearing the same cross and globe. These weigh 61½ grs., or c. ⅓ of the large coins, and are therefore Albuquerque's *soldo* or ⅓ *bastardo*.

How the "gentle Chins and honorable dwellers in the City of Malacca" were guided in their advice to Albuquerque in 1510, when he desired to reduce the local currency to Portuguese money may be gauged by a Chinese account of Java in 1418¹⁶ :— "Their weights are as follows :— a *kati* (*kin*) has 20 *taels* (*liang*), a *tael* 16 *ch'ien* and a *ch'ien* 4 *kobang*."

This statement supplies a table :—

4 <i>kobang</i> (<i>kupang</i>) ¹⁷	make	1 <i>ch'ien</i>
16 <i>ch'ien</i>	"	1 <i>tahil</i>
20 <i>tahil</i>	"	1 <i>kati</i>

1280 *kupang* to the *kati* (of tin).

If then the ratio of silver to tin be taken at its most constant rate 1 : 10 and it be assumed that the Chinese denominations have remained unaltered,¹⁸ then the *kupang*, 1/10th of the silver dollar, is reduced in value to a cent, and the following table for the silver unit results :—

128 <i>kāping</i> , <i>pitis</i> or <i>cash</i> ¹⁹	=	1 <i>kupang</i>
10 <i>kupang</i>	=	1 <i>milrei</i> (dollar)

1280 *cash* to the silver dollar unit.

This Albuquerque converted into 1000 *cash* to the *milrei*.

The whole story is curiously confirmed by another Chinese account of Java dated 1618²⁰ :— "The red haired barbarians [Dutch and English] have come to Hakang [Chinese name for Bantam] and have established a magazine on the eastern side of the great river, the Franks [Portuguese] have done the same on the western side ; and these foreigners arrive every year. In trading they use silver money, but the natives use leaden coins [*cash*] ; 1000 of them form a string and ten strings make a bundle. One bundle of leaden coins is said to be equivalent to one string of silver money." Clearly, the leaden coins were *cash* and the string of silver money was the dollar, one of which could purchase ten "strings," or "one bundle" or *kati* of tin.²¹

The general inference to be drawn from Mataden's and Castanheda's statements is that historically the scale of 400 cents to the dollar arose out of Dutch and British dealings directly with the Malays through their tin currency, and the scale of 1000 cents to the dollar out of Portuguese dealings with the Malays through the tin money of the Chinese.²²

¹⁶ *Miscell. Papers relating to Indo-China*, 2nd Ser., I., 177.

¹⁷ The original Chinese characters are rendered *kobang* in the translation. But for the confusion between the Japanese *koban* and the Malay *kupang*, see ante, Vol. XXVII., pp. 223 ff.

¹⁸ This is a fact ; see *op. cit.*, loc. cit.

¹⁹ *Cash* were commonly used in the Malay Archipelago in the 14th century : see *op. cit.*, pp. 215, 222, 248. But the History of the Sung Dynasty (960-1279) reports that there were no copper *cash* in Malay-land then ; *op. cit.*, p. 187.

²⁰ *Op. cit.*, p. 182.

²¹ Vasco da Gama in 1498 reporting on the Countries beyond Calicut by hearsay (*Hak. Soc. ed. of First Voyages*, p. 100), says, "There is also . . . much tin, of which they coin money : but this money is heavy and of little value, 3 *frasilas*, being worth only 1 *crusado*." *Frasil*, farcel, *fariala*, is an Arabic weight of c. 20 lbs. : the old *crusado*=100 reis=2/5 *milrei* or dollar=40 cents : 3 *frasilas*=60 lbs. represents the *kāping* (clab) of tin. At 8 *kāping*=1 *bahara*, this gives a *bahara* of 480 lbs. or more (see ante, pp. 99-100) but the silver value works out at only c. 3½ dollars to the *bahara*, or about 1/10 of the probable true ratio. The editor, E. G. Ravenstein, has a note : "The *frasilas* was equal to 10·54 kilo. ; the *bahar* was 210·22 kilo. ; the *crusado* was a silver coin and was valued at 360 reis (8s. 8d.)." In giving Mr. Ravenstein this information his Calicut correspondent seems to have mixed up the gold and silver Portuguese standards, the terminology of which is nearly identical.

²² The Portuguese early carried Albuquerque's coinage to India, where it still remained in Bombay in an instructive manner up to the end of the 18th century at any rate : witness Stevens, *Guide to E. I. Trade*, 1775, p. 124. "Bombay. Accounts are kept here in Rupees, Quarters and Raes : 100 Raes are 1 Quarter : 400 Raes are 1-rupee [i. e., 800 Raes=1 dollar]. Besides these Raes, which are made of lead with a stamp on them, there is a small coin made of tutenag [spelter,] called a *pie*, of which 80 are equal to a rupee." [The modern *pie* go 162 to the rupee.]

IV.

Analogies and Developments.

1

The Oriental influences, which induced the early Dutch merchants, Marsden for the British Government, Albuquerque for the Portuguese, and indeed the Malays themselves, to adopt respectively the sums of 400 and 1000 (to represent 1280) cash to the dollar, may be arrived at from an examination of the following quotations from an obscure official book, which thus becomes of the first importance for the present purpose. Brown, *Statistical Account of the Native State of Manipur*, p. 89, says:—"the only coin proper to the country is of bell-metal and small in size, weighing about 16 grs. This is coined by the Raja as required, goods and money being taken in exchange. The metal is obtained chiefly from Burma and consists of old gongs, etc. Some of it is also procured from the British provinces . . . The word *sri* is struck on it. . . . The market value of the *sel*, as it is called, varies. When rupees are plentiful, then *sel* are cheap, when scarce, the opposite. The present (1873) value of the coin is 428 to one British or Burmese rupee,²³ and its usual variation is said to be from 420 to 450."

Manipur is a Native State between Burma and Assam, which, in reference to Malay-land, is "beyond" Burma, and it will be seen from the foregoing statement that the bell-metal (brass and tin) money of that country is 800 to 1000 to the dollar of two rupees, thus showing the existence of a system of reckoning money analogous to that of the Malays for reckoning cash to the dollar.

An exhaustive enquiry²⁴ into the difficult and instructive question of the Manipuri monetary system shows that it was based on reckoning 400 *sel* to the rupee, in correspondence with the very ancient Indian system of 400 *dam* to the *jalsala* adopted by the Emperor Akbar for his gold coinage, that the *jalsala* equalled in weight the *tola*, the rupee or half-dollar weight, and that the Nepalese reckoned 400 *dam* to the *takka* (= *tola*) or rupee. These figures inevitably recall the 400 *pitis* or cash to the dollar of Malay-land.

The enquiry also shows that the 400 *sel* to the rupee of Manipur were reckoned by nomenclature as 5000 cowries,²⁵ that the standard scale for reckoning cowries was 400 to the anna or 1/16 rupee (= 6400 cowries to the rupee), that the *sel* of Manipur was the Indian *dam* of Akbar's time (16th century) and of modern Nepal, and that the origin of the Manipuri scale was directly due to the system of reckoning cowries. Thus, Manipuri *sel* are reckoned for purposes of account by fours, exactly as cowries are reckoned by the *ganda* or quartet, i.e., by sets of four. The process was the practical and handy one of separating the cowries four at a time from the heap with a finger or stick and counting verbally²⁶ the quartets thus separated.

In this method of Indian reckoning, certain sums constantly recur, 400, 640, 1280, 5000 *sel* and cowries going to certain units of account, and the cowries themselves to certain units in multiples of 400, as 800, 1600, 3200, 4800, 6400, 7200. The foregoing pages show that these very figures recur over and over again in reckoning cash to the dollar of account and other units.

There are thus presented to us here the two concurrent facts, that the standard Malay scales of cash to the dollar existed very long ago in India and have been preserved there in different places to the present day, and that these scales were directly

²³ That is, of the coinage of King Mirdon minted at Calcutta.

²⁴ *Ants*, Vol. XXVI., p. 290 ff., and Vol. XXXIII., p. 169 ff.

²⁵ That is, the people though using *sel* still count them in terms of cowries. Precisely the same thing has happened in Kashmir where the terms for reckoning money still represent those for reckoning cowries: 4000 (for 4000) cowries to the rupee. Stein, *Notes on the Monetary System of Ancient Kashmir*, 1899, pp. 36, 38-40.

²⁶ The process can be seen to this day in the *fantau* gambling with cowries at Macao in China.

connected with those for counting cowries. The inference therefore is that, whatever the method of reckoning may have been when cash were first introduced to the Malays by the Chinese, the Malay scales for counting such a small denomination as the cash had, in the course of centuries of commerce, come to be based on those for counting cowries in India; just as they adopted the Indian nomenclature for the currency and money.²⁶ The cash were presumably treated in the same way as cowries for reckoning, *i. e.*, they were separated from the heaps four at a time before stringing together.

The Malays, the old Dutch merchants, Maraden and Albuquerque were in fact, though probably unconsciously, utilising the general Indian and locally commonly recognised system of counting cowries, and treating cash as metal cowries, in adopting scales for currency and monetary purposes in the Malay peninsula.

3

How far afield from Malay-land the ideas that have led to the counting of 400 cash to the dollar in modern times had spread in ancient days westward from India may be seen in the following important passage from Ramusi, *Delle Navigazioni Viaggi*, Vol. II., f. l. 158b, 1606,²⁷ quoting Herberstein, 1559:—"The old Muscovite money is not round, but oblong or egg-shaped and is called *denga* . . . 6 *denga* make an *altin*; 20 a *grifna*; 100 a *poltina* and 200 a *ruble*." *Grifna* is the modern *grivna* of the Russian currency: *denga*²⁸ is a direct descendant of *tanka*,²⁹ the ancient Indian weight and coin. The above quotation supplies a scale, which with quite extraordinary completeness corresponds to the existing Malay scale of 400 cash to the dollar.

Russian scale.		in terms of cents to dollar		Malay scale.	
	1 <i>denga</i>	$\frac{1}{6}$	4	$\frac{1}{4}$ sen (cash)	
6 <i>denga</i>	make 1 <i>altin</i>	$1\frac{1}{6}$	1 4 quarter sen	make 1 sen	
$3\frac{1}{6}$ <i>altin</i>	" 1 <i>grifna</i>	5	5 5 sen	" 1 <i>buaya</i>	
5 <i>grifna</i>	" 1 <i>poltina</i>	25	25 5 <i>buaya</i>	" 1 <i>soku</i>	
2 <i>poltina</i>	" 1 <i>ruble</i>	50	50 2 <i>soku</i>	" 1 <i>jampal</i>	
	(<i>Rorin</i> or half-dollar)			(<i>rupee</i> or half-dollar)	
[2 <i>ruble</i>	" 1 dollar]	100	100 2 <i>jampal</i>	1 dollar	
400 <i>denga</i> (cash) to the dollar			400 cash to the dollar		

²⁶ See *ante*, Vol. XXVI., p. 45 f.

²⁷ Quoted in English by Yule, *Hobson-Jobson*, s. v. *Tanga*.

²⁸ Plural, *dengy*.

²⁹ Just as are the modern *dinga* of Burma, and (through the alternative form *taka*) the *tikal* of Siam. See *ante*, Vol. XXVI., pp. 235 f., 238 f. Mr. Blagden tells me that in old Talaing inscriptions *tikal* is found in the form of *daker* (for *datel*).

Another quotation derived from Yule, *Hobson-Jobson*, s. v. *kopek*, gives a history for this currency of Russia curiously analogous to that in Malay-land. Yule quotes Chaudoir, *Aperçu sur les Monnaies Russes*:—"It was on this that the Grand Duchess Helena, mother of Ivan Vassilievitch, and regent in his minority, ordered in 1535, that these *dengui* should be melted down and new ones struck, at the rate of 300 *dengui* or 3 roubles of Moscow à la *grivenka* in *kopek* . . . From that time accounts continued to be kept in *rouble*, *kopek* and *dengui*." The *kopek* is the hundredth part of a *rouble* and therefore half a cent, or 200 to the dollar, or 2 *dengy*, which commences the scale of 400 to the dollar even more closely in the Malay style than the scale just shown:—2 quarter cents (*denga*)=one half cent and so on. The story is carried on into modern times³⁰ with an illuminating double scale, as in India and the Far East: one of account in *kopek*, 100 to the *rouble*, with halves (*denushka*) and quarters (*polushka*), 800 (cash: *polushka*) to the dollar; the other with 10 *griven* (also written *grivener*) and 33½ *altin* to the *rouble* of money, or in other words with a survival in terminology of the old scale of 400 cash to the dollar.

3

The analogy between the European and Oriental scales does not rest here, and as a matter of fact the alternative scale of 1000-1280 cash to the upper unit found in Malay-land must have been quite familiar to both the Portuguese and Dutch traders to the Malay Archipelago, as in those times exactly similar relations prevailed in their own respective countries.^{30a} Thus, in Portugal itself the old scale ran then:³¹

20 reis	make	1 vintem.
5 vintem	"	1 teston.
4 teston	"	1 (old) cruzado.
2½ cruzado	"	1 milrei.

1000 reis to the milrei (dollar).

Whilst the actual figure of 1280 to the dollar unit or its half, 640 (exactly as in Malay-land) was then found in Germany. Thus³²:—

(Liege, then in Germany).

4 pfening	make	1 liard
4 liard	"	1 stiver
10 stiver	"	1 escalin
2 escalin	"	1 florin
4 florin	"	1 patcon (dollar)

1280 pfening to the dollar.

Vienna.

2 heller	make	1 pfening
3 pfening	"	1 groschel
1½ groschel	"	1 kreutzer
3 kreutzer	"	1 groschen
2½ groschen	"	1 schilling
5½ schilling	"	1 rixguldén
2 rixguldén	"	1 rixdollar

640 heller to the dollar.

³⁰ Kelly, *Universal Cambist*, 1835, I., 209.

^{30a} That this was the fact, so far as the Portuguese were concerned, is proved beyond doubt by the following quotation from the *Commentaries of Albuquerque*, Vol. III., pp. 77f., *Hak. Soc.*, Ed.:—"This King Xaquendarza [Sikandar Shah of Malacca] . . . desired to see the King of China . . . so he set out from Malacca, taking with him a present for the King of China . . . became his vassal . . . and obtained permission to coin small money of pewter, which money he ordered to be made as soon as he reached Malacca; and to it he gave the name of *caisai*, which are like our *ceitils*, and a hundred of them go to the *caisai*, and each *caisai* was worth, according to the appointed law, eleven reis and four *ceitils*. Silver and gold was not made into money, but only used by way of merchandise." From this statement we get the fact that the Malay *cash* was recognised by the Portuguese as analogous to their own *ceitil*, an obsolete coin, which Birch shows, in a note to p. 78, ran 6 or 7 (the above quotation makes it c. 2½) to the *rei*, or 6000 to the silver dollar. Albuquerque's story gives incidentally a traditional date for the introduction of cash into Malay-land, as Sikandar Shah visited China in 1411; (*op. cit.*, p. 81a., 2, Yule, *Marco Polo*, 2nd Ed., pp. 263 ff.).

³¹ Kelly, *Universal Cambist*, I., 280.

³² *Op. cit.*, pp. 209, 349.

The double of the 400 cash to the dollar scale is to be seen in that of the old Dutch scales.³³

Amsterdam and Rotterdam.

16 pfening	make	1 stiver
20 stiver	"	1 guilder
2½ guilder	"	1 dālder (rixdollar)

800 pfening to the dollar.

The general European scale, on which the above and very many others in the western countries are based, is that established by Charlemagne so long ago as the 7th century A. D.³⁴

12 denarii	make	1 solidus
20 solidi	"	1 libra (pound)

240 denarii to the libra.

This scale gave rise to others which spread over Europe and especially to the Latin countries and were in force up to the 18th and 19th centuries. This scale works out to 960 *denarii* to the dollar, because the *libra* under various forms stood constant through the centuries at about a quarter of a dollar. Thus:—³⁵

France	Italy	Spain
12 deniers	denari	dineros
20 sols (sous)	soldi	sucldos
4 livres	lire	libras
		} make 1 dollar.

960 deniers, etc., to the dollar.

To show the close connection between the German and Latin ideas on monetary scales, there was a Vienna scale for money giving 960 heller to the rixdollar (Kelly, *op. cit.*, p. 348).

In old Germany there was a scale that worked out on two lines of division to 288 pfening³⁶ to the rixdollar, which by multiplying by both 4 and 5, as the Dutch did in the Malay Peninsula, has led to instructive scales for the present purpose: ³⁷

Old Copenhagen			Old Hamburg		
4 pfening	make	1 witte	2 pfening	make	1 dreyling
1½ witte	"	1 fyrke	3 dreyling	"	1 grote
2 fyrke	"	1 skilling	12 grote	"	1 shilling
16 skilling	"	1 mark	8 shilling	"	1 rixdollar
1½ mark	"	1 ort	2½ rixdollar	"	1 pound
4 ort	"	1 rixdollar			

1152 pfening to the dollar.

1440 pfening to the pound (Flemish).

There were other connected scales in Europe most reminiscent of those in the Malay Peninsula. For instance in Poland there were two—one double of the other—in different divisions of the country, of 540 *pfening* to the *sloti* or ½ rixdollar and the other 1080. Here we

³³ *Op. cit.*, pp. 8, 297.

³⁴ Chalmers, *Hist. of Currency in the Brit. Colonies*, p. 398 f. n.

³⁵ Kelly, *op. cit.*, pp. 141, 344, 348, 318.

³⁶ This figure of 288 to the upper unit was once common in Europe.

³⁷ Kelly, *op. cit.*, pp. 74, 167.

have the "cash" pure and simple at 4320 and 8640 to the dollar respectively.³⁸ Another scale showing a very low small denomination was that of Dantzie on the German Baltic³⁹ showing 1620 *pfening* to the rixdollar.

Without pursuing the enquiry further it seems to be clear that, in the Malay Peninsula and in Europe, mankind has been working on identical lines in devising means for finding proportions into which to divide its currency. And it seems also reasonable to assume that the scales have all originated out of the simple and necessary processes of rapidly separating (for counting) shells, beans or seeds from the heap, the said shells, beans and seeds having been selected for the purpose on account of their observed constant average weight.

4

The wide spread and the antiquity of the ideas leading to the Malay scales for currency and money are thus clearly brought out, but the *gambar* (model of animal) currency can be shown to give concrete form to ideas equally ancient and widely distributed in Oriental lands.

That the principle of metal currency in ingots and models of animals and common objects was of recognised standing in India in the 1st or 2nd century B.C. is attested by the quotations which follow.

Firstly, there is a statement in the *Nidānakathā*,⁴⁰ a Sinhalese Buddhist compilation of the 5th century A.D. about the land on which Anāthapiṇḍika, the famous rich merchant disciple of Buddha, built the Jetavana Vibāra or Monastery⁴¹ :—"Long ago, too, in the time of the Blessed Buddha Vipassin, a merchant named Punabbasa Mitta bought that very spot by laying golden bricks [? ingots] over it, and built a monastery there a league in length. And in the time of the Blessed Buddha Sikhin, a merchant named Sirivaddha bought that very spot by standing golden ploughshares over it, and built there a monastery three quarters of a league in length. And in the time of the Blessed Buddha Vessabhā, a merchant named Sūtthiya bought that very spot by laying golden elephant feet along it, and built a monastery there half a league in length. And in the time of the Blessed Buddha Kakusandha, a merchant named Achchuta also bought that very spot by laying golden bricks on it, and built there a monastery a quarter of a league in length. And in the time of the Blessed Buddha Kōṇagamana, a merchant named Ugga bought that very spot by laying golden tortoises over it, and built there a monastery half a league in length. And in the time of the Blessed Buddha Kassapa, a merchant named Sumaṅgala bought that very spot by laying golden bricks over it, and built there a monastery sixty acres in extent. And in the time of our Blessed One, Anāthapiṇḍika, the merchant bought that very spot by laying *kahāpaṇas* over it and built there a monastery thirty acres in extent."

The writer, in bringing the legendary history of the Monastery down to then comparatively modern times, is obviously using expressions, "bricks," "ploughshares," "elephant feet," "tortoises," which indicate ingots of certain shapes current as weights in his time, till he comes to the last payment, which he states in terms of a recognised weight.⁴² As a matter of fact he was recording in monkish fashion a legend that was in existence many centuries earlier.

Plate LVII of Cunningham's *Barhut Stupa*, 1879, contains an inscribed bas relief, which represent Anāthapiṇḍika making over to the Church (Saṅga) the park of Jetavana, which he had

³⁸ Kelly, *op. cit.*, p. 278.

³⁹ *Op. cit.*, p. 83.

⁴⁰ Rhys Davids, *Buddhist Birth-stories*, p. 132 f.

⁴¹ The account purports to relate to a gold ingot currency, of which the following is a quite modern instance: "Gold continues to pass current in small uncoined round balls usually weighing a *tolr*." W. Robinson, *Account of Assam*, 1841, pp. 249, 257 in Ridgeway, *Origin of Currency*, p. 177 n.

⁴² *Kahāpaṇa* (Skr. *kāshapana*) was in general terms a gold weight = 16 *māṣa* or about 176 gr.

purchased by covering the ground with a layer of crores (*koṭi*): see Pl. VII. *infra*. The inscription says: "*Jetaraṇa Anāthapiṇḍiko deti koṭisanthātena keta*; Anāthapiṇḍika, purchaser for a layer of crores, presents Jetavaṇa."

The date of the Barhut sculptures is of the 2nd or 1st century B. C., or some six centuries earlier than the *Nidānakathā*, but that work gives the legend in almost identical terms⁴²:—*Tasmāin samaye Anāthapiṇḍiko gaḥapati . . . Jetaraṇam koṭisanthārena atthāsasa-hiraññakotiṇi kīṇitā*: at the same time the householder Anāthapiṇḍika having purchased the Jetavaṇa (Jeta's park) for a layer of crores, or eighteen crores of treasure."

It will be observed that embroidery has accrued to the story in the six centuries, and that the layer of crores had become, by a clear addition, 18 crores of gold (or treasure), and also a layer of definite gold coins (*kaḥāpaṇa*, practically the modern gold *mohar*). Plate VII. *infra* shows a medallion on a pillar of the Barhut Stupa describing the scene: men are taking stamped bricks or ingots, not coins, from a bullock cart, and spreading them in the garden under mango and sandalwood trees, while Anāthapiṇḍika, with a libation ewer in his hand, is making a present of the ground for the monastery.⁴³

In translating the expressions *koṭi* (crore), *kaḥāpaṇa* (coins), *hirañña* (treasure, gold), Cunningham, Hultsch (Bharhut Inscription No. 38: *ante*, vol. xxi., pp. 226, 230), and the others all agree in making the purchase price "crores of gold coins," thus turning the story into a manifestly exaggerated legend. On this point we can, however, usefully turn for the present purpose to Stein's edition of Kalhana's *Rājatarāṅgiṇī*, or *Chronicles of Kashmir* (A.D. 1148), in which prices are frequently stated in exact sums of *dināra*, an obvious derivative of the Roman *denarius* and used in the East for a gold coin. It has been so used by most commentators on the *Rājatarāṅgiṇī*, but so far from representing gold coins, Stein shows that *dināra* meant in Kashmir, firstly a coin of any kind, and secondly just money or currency.

Stein quotes a case of daily pay stated at a lakh (100,000) of *dināra*, sets himself to solve the question⁴⁴ of what the Kashmir *dināra* really was, and shows that as a money of account it represented what is now our old friend the cash; i.e., it ran 320 to the rupee or 640 to the dollar. His instructive table (p. 36) is worth reproducing in part here.

Ancient Kashmir Currency.

Value in <i>dināra</i>	Designation.	Equivalent values in	
		dam	rupees
12	dvādasa (bāḥgaṇi, "bargany")	1/8	1/320
25	puntshu	1/4	1/160
100	sata (hath)	1	1/40
1,000	sahasra (sāsūn)	10	1/4
100,000	laksā (lakh)		25
10,000,000	koṭi (crore)		2,500

If then we follow Stein (p. 22) and interpret the statements as to the price paid for Jetavaṇa as meaning crores of metal currency instead of gold, then the sum of 18 crores of currency (*atthāsasahiraññakoti*) represented Rs. 2,500 by 18 = Rs. 45,000 or say £2,000 of modern English money as the price of land required for monastery buildings covering 30 acres.

⁴² *Barhut Stupa*, p. 85. Also Faussell, *Jātaka*, I., 92.

⁴³ The story is a Buddhist favourite and appears in Hsien Tsiang, Fa Hien, Hardy's *Manual of Buddhism*, etc. *Barhut Stupa*, loc. cit. Cunningham *Mahabodhi*, Pl. VIII, fig. 8, which carries the story to Asoka's time, B. C. 250. Cunningham, *Coins of Ancient India*, pp. 6, 7.

⁴⁴ Notes on the Monetary System of Ancient Kashmir. *Numismatic Chronicle*, 3rd Ser. xix., pp. 125-174. Reprint p. 36. See also Stein, *Kalhana's Rājatarāṅgiṇī*, Tr., II., 306 ff.

These figures, even on Stein's statements (pp. 8, 14) can be cut down to half or a quarter, and in fact probably represented a still smaller sum, bringing the actual payment to a reasonable and credible amount.

All this leads to the conclusion that the legend records a transaction that really took place and that Anāthapiṇḍika bought the ground and expended on it a sum that was paid in ingots of currency. The sculptures show that in the century before Christ such ingots were usually stamped, and the legend of the 6th Century A.D. shows that they also often took the form of animals and common objects.

As regards Europe and the near East, Professor Ridgeway, in a note to Mr. Skeat, says he has "a silver ingot from Russia called *griena* or neck-ring, once used as currency and found in graves along with the actual silver neck-ring. In modern times the term *griena* (plu. *grieny*) means a coin worth 10 *kopek*."

Professor Ridgeway also quotes⁴⁶ a passage from Brugsch, *Hist. of the Pharaohs*, Eng. trans. 2nd ed., I., 386, when referring to the days of Thothmes III. and Ramesses II. of Egypt (c. 1500-1300 B.C.):—"Solid images of animals in stone or brass in the shape of recumbent oxen took the place of our [modern European] weights." And he gives an illustration of an ancient Egyptian weighing by a steelyard or graduated balance with bull and ring weights.⁴⁷

Professor Ridgeway further quotes (p. 271) Professor R. S. Poole⁴⁸:—"The sanction of the LXX., and the use of weights bearing the form of lions, bulls and geese by the Egyptians, Assyrians and probably Persians, must make us hesitate before we abandon a rendering [the Septuagint "lamb" for Hebrew *qesita*; translated "piece of money" in Gen. xxiii. 19: Joshua xxiv. 32: and Job xlii. 11] so singularly confirmed by the relation of the Latin *pecunia* [cumulative property: money] and *pecus* [cattle, including sheep]." In support of this statement Professor Ridgeway exhibits (p. 271) two stone "lamb" weights from Syria and Persia respectively⁴⁹ and a further illustration of the transfer of the "lamb" weight to the stamp on money by a Phœnician coin from Salamis in Cyprus (p. 272).

In Burma the *chinthé* is a mythological lion, and the *to* is a mythological deer (half deer, half horse),⁵⁰ and both are representative of guardian spirits. Examination of various forms, which these creatures assume in sculpture, picture and engraving, show them to be respectively the greatly degenerated modern descendants in a far country of the ancient Assyrian guardians, the winged lion and the winged bull. The Assyrians also used models, both of the lion and the

⁴⁶ *Origin of Metallic Currency and Weight Standards*, p. 128.

⁴⁷ *Loc. cit.*, from Leipsius, *Denkmäler*, p. 331.

⁴⁸ Madden, *Jewish Coinage*, p. 7.

⁴⁹ About 1892 I secured a silver "lamb" from a Baghdādi Jew in Rangoon. In 1906 Prof. Barton recognized a tortoise bronze weight in Palestine with a Hebrew inscription showing it to be a quarter *seceph* (shekel). This tortoise was a Phœnician symbol and became transferred to the once widely spread Aeginetan "tortoise" coinage of ancient Greece, *Quarterly Statement*, Palestine Exploration Fund, October 1912, pp. 182 f.

⁵⁰ In practice the *to* has now become a "lion"; see *infra*, p. 123. There can be little doubt, however, that the *to* of the Burmese is of the same origin as the national guardian *ki-lin*, of the Chinese, transferred to Japan as the *kirin*, both in its winged lion and winged horse-deer form. Whatever can be proved as regards the one in reference to origin will hold good of the other: vide Kaempfer, *Hist. of Japan*, 1690: reprint of 1906, Vol. I, pp. 191-92; figs. 25, 26 and 28. Gould, *Mythical Monsters*, 1886, has a valuable Chapter (x., p. 368) on the unicorn with which he connects the *ki-lin* and its congeners, showing the instructive connection of the *iu* (unicorn) with a Chinese representation of the sphinx (p. 360, figs. 81-7).

bull as standards of weight (Plate VI., figs. 4, 5 and 6). These considerations lead to a possible origin for some forms at any rate of the animal models used for weights and currency in the Far East, where the two ideas are still habitually mixed up in the popular mind.

In 1892 I had a plate drawn (*ante*, Vol. XXVII., p. 141) of Burmese metal weights (*alē*)⁵¹ in the form of animals, which were then still in use in Upper Burma as official standards of the old Burmese Kingdom.⁵² These weights took the form of *chinthē*, *to*, *min* (elephant), *ncwadi* (bull), and *myauk* (monkey), besides the common *henthā*⁵³ (goose) of the bazaars. Notices of these have been traced in the writings of travellers from 1786 (*ante*, *loc. cit.*). About 1881 Carl Bock (*Temples and Elephants*, p. 159) found old native weights still in use in the form of the "hoong or sacred goose" [*i. e.*, the *henthā* of Burma], or of an elephant, among the Shans and Laos of Upper Siam. I saw this collection and they consisted of counterparts of the standard Burmese weights—*henthā*, *ncwadi* and *myauk* (goose, bull and monkey). This looks as if the animal weights had travelled from Burma into Siam.

The *chinthē* (lion) of Burma became transferred from the weights to the European-minted gold coinage of the late Alompra dynasty, together with the royal cognisance of the peacock and the hare (see Pl. IV., figs. 8 and 10). In the other parts of the Far East, the cock appears on a modern *duit ayam* (copper cash : Pl. III., fig. 8), and unmistakably on a very rough coin from Mergui (Pl. V., fig. 5). The goose is seen on a Cambodian coin of 1848 (Pl. III., fig. 10) and on a Tenasserim weight of 11½ oz. = the *pānjura* of the tin currency lower down the coast (Pl. IV., fig. 11). The *to* is found on a spelter (tin and lead) coin from Mergui (Pl. III., fig. 9, Pl. V., fig. 3).⁵⁴

The Mergui weights and coins had on the reverse debased imitations of Burmese legends, which one of them shows to have been *Mahāsukham Nāgarām* (ungrammatical Pali).⁵⁵ This again points to the importation of the animal currency to the Malay Peninsula from Burma, as did the finds of Bock in the case of the Shans of Upper Siam. Such an inference is confirmed by a Plate in Tavernier's *Travels*, Eng. ed. 1678, I., Pt. II., 6 t., (given *ante*, p. 103). This was copied by Crawford, *Hist. Ind. Archipel.*, 1820, I., p. 150, and shows a tin coin purporting to come from Perak and Kedah, which, he says weighed 1½ oz. = *kati* or *tampang*. The obverse has a snake and the reverse some marks that might pass for serpents, but are more probably a further breaking down of the above mentioned Burmese legend on the coins from Mergui.⁵⁶ Plate V., figs. 3 and 4, also shows that the "snake" coin may after all be only a debased or "developed" *to*.

⁵¹ All presented to the British Museum.

⁵² Plate IV. figs. 5 to 9.

⁵³ One variety of this is called *siangse*, the swift of the edible birds' nests.


⁵⁴ Such coins were found being used as gambling tokens in Rangoon in 1899.

⁵⁵ Figs. 9, 10, 11 of Pl. III. are all from Phayre, *Internat. Numis. Orientalis*: Coins of Aracan, Pegu and Burma, 1882. The legend would mean City of great peace. This legend *Mahāsukha-nagara* seems to refer to Kedah, which on later coins assumed the Arabic form of *Dārul-amān*, Land of peace. *Vide* Appx. III., *infra*, where Millier's readings are *Dārul-amān Balad Kedah* and *Dārul-amān Kedah* (Land of peace, City of Kedah and Land of peace, Kedah) on tin coins of 1741 and 1809. Mr. Blagden tells me that the capital of Kedah was known in the 13th and 14th Centuries as *Lōngkasuka*, "Land of Peace," a name still remembered.

⁵⁶ A comparison with the imitation Burmese characters on the Mergui coins will show this. See Phayre's Pl. IV., figs. 3 and 5.

The general inference, therefore, is that the idea of a model-animal currency travelled Eastward to Burma, and thence further East still into the Malay Peninsula and Siam.⁴⁷ This inference is strongly supported by a statement by La Loubère (*Hist. Relation of Siam*, 1687-8, trans. 1698), who says (p. 14) that "Vincent le Blanc [a physician working the King of Siam's mines] relates that the Peguins [Talaings of Burma] have a mixture of lead and copper, which he sometimes calls *ganze* [plu.] and sometimes *ganze* [sing.],⁴⁸ and of which he reports they make statues and small money which is not stamped with the king's coin, but which every one has a right to make."

Against this inference, however, must be set the ancient Chinese model knife money, the origin of the form of the "cash," and the model bee money, still in use in Upper Siam, which point to an independent development of the idea of the model tin currency and subsequent coinage of Siam and the Malay Peninsula out of models of common objects (Pl. VI., figs. 7 and 8). Also the *henthā* weight or coin exhibited by Phayre (*op. cit.*, Pl. V. 2), bears an inscription obviously of Arabic origin, while Plate V., fig. 4, *infra*, bears a debased Arabic inscription with a probable date corresponding to 1408 A. D., showing that other influences have been at work.

The very close connection between the Malay tin "hat" money and the spelter and tin coins of the whole West Coast of the Peninsula came out clearly in an official letter of the Deputy Commissioner of the Mergui District, dated 27 May 1891, communicated to me by the late Mr. Hesketh Biggs, Accountant General of Burma, on the 28th Nov. 1895. It relates to two boxes containing "two sets of tin money", both of which have now unfortunately disappeared, but the letter shows that specimens are still probably procurable in Tenasserim without much difficulty. "The round pieces," ("about the size of a rupee" in Mr. Biggs' covering letter: cf. the "cock" coin, Pl. V., fig. 5), "are coined at Renoung"⁴⁹ and some on our side amongst the Chinese and Siamese. They are valued at 10 cents and 5 cents respectively, of the Straits Settlements currency. The Pagodas (shaped Mr. Biggs said ) which are cast by the mine lessees, are used in barter in the neighbourhood of mines at Thobawteik and elsewhere, and are valued at about 2 annas, 3 annas and 4 annas each." In other words the coins represented the *tampang* 1/10 dollar and *buaya* 1/20 dollar respectively, and the "hat" coins a *pinjura* 1/16 dollar, a *tampang* 1/10 dollar and a *tali* 1/8th dollar, of the ingot and *gambar* ingot tin currency of the Federated Malay States.

V.

GENERAL CONCLUSIONS.

The evidence available as to the tin currency and money of the Malay Peninsula seems to justify the following general conclusions.

The regulated solid tin ingots constituted a currency made, out of the customary forms of native tin castings, to meet the necessities of an external trade carried on by means of barter and currency, and to conform in weight and size to the weight-standards of that trade.

⁴⁷ The *ringgit babi* (*infra*, Appx. I, No. V) or pig dollar may represent a *gambar babi*, pig ingot, and the snake a *gambar ular*, snake ingot, yet to be unearthed.

⁴⁸ The Indian *kansa*; Malay *gansa*: bell-metal, bronze; also used for lead and spelter. See Yule, *Holmes & Johnson*, s. v. *gansa*. La Loubère, however, merely copied Caesar Frederick, 1567, in the last part of his statement. See Hakluyt, Maclehoose ed. v., 431; Purchas, Maclehoose ed. v., 131.

⁴⁹ Between Burma and the Federated Malay States in the Malay Peninsula.

Tin was adopted for the purposes of currency as being the staple metallic product of the Peninsula, and the system of tin currency devised by the Malays has not materially varied in historical times.

The solid "animal" ingot tin currency arose out of an attempt to improve the regulation of the solid ingot currency by giving it readily recognisable forms, which could be made to conform to definite standards; while the forms themselves were copied from those in use—with a very long history behind them—by the neighbouring countries carrying on the external trade, which were mainly Burma⁶⁰ and China (directly or through Siam).

In regard to the weight standards of the countries trading with the Peninsula, I have shown, *ante*, Vol. XXVIII, pp. 102 ff., that the ponderary (Troy) scales in use in the whole of the Far East were originally based on that of ancient India, which in its turn was connected with that of ancient Greece;⁶¹ that the terminology of the international commercial ponderary scales east of India is Malayan with a partly Indian basis; that the standards of weight for metallic currency spread eastward from India; that the basis of the standard was the seed of the *abrus precatorius* creeper (*rati*, *rakat*, crab's eye⁶²), with its double, the seed of the *adenanthera pavonina* tree (*kondori*, *kündürü*, redwood-seed, candareen); and that these two seeds were habitually mixed up in the popular mind, producing in various countries and places concurrent scales of standard weights, one double of the other and often mixed up.

The hollow tin money of the Peninsula grew in form, weight and size out of the solid tin currency, so as to meet the necessities arising out of a later external trade carried on by means of money.

The first external nation to use coined money in trading with the Peninsula was China, whose traders adopted a system of spelter coinage to suit the native tin currency.

The various European systems of coinage adopted to suit the trade with the Malay Peninsula are the descendants of the native tin currency: in the case of the British by direct descent; in the case of the Dutch by descent from the Chinese spelter coinage through the Portuguese.

The scales of the Malay tin currency were based in the first instance on the standards of the external trade, and later on were modified so as to conform to the scales of the predominant nations successively carrying on that trade in money—Chinese, Portuguese, Dutch and British; the necessities of the trade having always mutually affected the evolution of the scales by the Malays and the nations dealing with them.

All the existing scales used in the Peninsula—Malay, Dutch through Portuguese, and British—for the enumeration of cash for monetary and currency purposes are adapted from the Indian system of counting cowries as money, which in its turn is closely analogous to the system long since adopted in Europe for describing money.

The currency and money used in the Peninsula, in their final forms up to date, thus exhibit a clear instance of the development of human thought along a definite main line, as affected by environment and contact with outside influences.

⁶⁰ But not the Burmese, who have but recently dominated the country now named after them. The old trade must have been carried on by the Talaiings (Mons) or by the Siamese (Shans).

⁶¹ See also Vol. XXVIII, p. 103; XXVII., 314 ff.

⁶² Also starling's eye, cock's eye, Job's tears, King Charles's tears. See also Wilkinson, *Dict. S. et. Sags* (*adenanthera pavonina*) and *Saga Sélins* (*abrus precatorius*), for which last a Malay term was *matlaburung*, bird's eye; see *infra*, Appx. IV., Extract No. VI.

VI.

EXPLANATION OF PLATES.

Plate I.

Ex. coll. W. W. Skeat.

Fig. 1. "Hat" money, apparently the *bidor*, quarter dollar. It is of a different mint from that of figs. 2, 3 and 4. The inscriptions are Chinese and ? Arabic.

Figs. 2, 3 and 4. "Hat" money in three sizes, made so as to fit into each, and holed for carrying on a string (*tali*). They represent respectively the quarter, twelfth and twentieth of a dollar: see *ante*, p. 88. They came from the same mint as my own specimens (*ante*, p. 90, n. 34), which are dated 1864 and 1829. They all bear legends in Malay on the inner rims. Fig. 3 is dated A. H. 1265 = A. D. 1849.

Fig. 5. A *gambar buaya*; "crocodile" tin ingot: length about a foot, representing probably *buaya pēnēngah*, mid *buaya* or *jampal*, half dollar, in the tin currency (*ante*, 96 n. 49).

Figs. 6 and 7. *Gambar ayam*; "cock" tin ingots, pierced for stringing together and representing the *tali* and *pēnjura* of the tin currency, the eighth and sixteenth of a dollar (*ante*, p. 94.)

Plate II.

Ex. coll. G. M. Laidlaw.

This plate represents a collection of tin ingot currency made by Mr. G. M. Laidlaw in 1904 in Lower Perak, of which he took two photographs. There are four more figures in Fig. 2 than in Fig. 1: all "crocodiles" (*gambar buaya*).

The figures correspond thus:—

Crocodiles.			Cocks.			Elephants.					
Fig. 1.	1	Fig. 2.	2	Fig. 1.	2	Fig. 2.	21	Fig. 1.	6	Fig. 2.	5
	8		7								
	10		4		5		1		7		11
	11		10		12		17		9		12
	17		9		14		20		13		19
	18		13		16		18		15		8

Four crocodiles in Fig. 2, Nos. 14, 15, 16, 22, have no corresponding forms in Fig. 1.

There are in addition to the *gambar* currency, two specimens of the "pagoda" ingot: no. 4 in fig. 1, and under the "crocodile," no. 4 in fig. 2. In fig. 2, no. 3, is an independent specimen of a "pagoda" ingot.

The plate seems to show that there must have been more denominations of *gambar* currency than those of which we have definite information at present.

Fig. 1, no. 3, corresponds with Fig. 2, no. 6. Mr. Laidlaw, in his letter of 14th June 1904 says that this is a *jongkong*, or firstling of the smelting house, to which a superstitious value was attached that caused these first fruits to be bequeathed as heirlooms. As currency they corresponded with the *tampang* of 22½ oz. or 10 cents. See *infra*, Appx. I, No. V.⁶³

⁶³ Normally they were of most uncertain size and weight, as they were also cast from the superfluous tin left over after casting the *képang* or slabs.

Plate III.

Figs. 1-8 *ex. coll.* W. W. Skeat.

Figs. 1, 2 and 3. Rough specimens of tin ingots of the "sugarloaf" form in the Cambridge Museum: *ante*, p. 88.




Figs. 4, 5 and 6. Specimens of tin ingots of the "pagoda" form, with the *tampok manggis* mint mark . Figs. 5 and 6 are in the Cambridge Museum, *ante*, p. 88.

Fig. 7. Tin ingot of the "sugarloaf" form in the Cambridge Museum, bearing the *tampok manggis*  and the *melumba*  mint marks: *ante*, p. 88.

Figs. 8, 10 and 11. Developments in money of the *gambar ayam* (cock) tin ingot. Fig. 8 is a *duit ayam*, coined copper cash^{63a}; Fig. 10 a Cambodian coin of 1808 (*ante*, p. 118): Fig. 11 is a spelter "cock" coin of Tenasserim (Mergui, *ante*, p. 118). Fig. 9 is a spelter "to" coin from Tenasserim (*ante*, p. 118).

Plate IV.

Figs. 1, 2, 3, 4, 5, 6. Burmese ingot weights (iron) *ex. coll.* R. C. Temple. (1) *chinthé*, lion; (2) *sin*, elephant; (3) *hentha*, goose; (4) *myauk*, monkey; (5) *mwadi*, bull; (6) *siweaso*, swift.

Figs. 7, 8, 9, 10. Coins of the Alompra Dynasty: *ex. coll.* R. C. Temple.

7. Copper: coin of Thibaw (1878-1885). Obv. *to tasek tau*, and figure of a *to*, which is here evidently a "lion." Rev. *Yedanabon nebyidaw*; 1 *mu thong dinga i 8 pon tabon*, 1240 (Burmese Era) Royal stamp of the *to*: Ratanapurna (Mandalay) the royal residence; 8th part of a coin to be used as one *mu* (64th part of one rupee = $\frac{1}{4}$ anna), 1878⁶⁴.

8. Gold: coin of Mindon Min (1852-1878). Obv. *to tasek tau*, 1240, and figure of *to*. Rev. *Yedanabon nebyidaw*: 5 *mu thong dinga*. Coin to be used as 5 *mu*, 1878: = half a (gold) rupee, or 8 rupees as the standard then was. This coin is evidently the forerunner of no. 7. There was a gold rupee or *mo har* with a *chinthé* (lion) on it. Obv. *Chinthé tasek tau*, 1228. Rev. *Yedanabon 1 kyat thong dinga*. Royal stamp of the lion, 1866: coin to be used as 1 (gold) rupee.

9. Copper (? debased): coin of Mindon Min. Obv. figure of a peacock and *adaung tasek tau*, 1227. Rev. *Yedanabon nebyidaw 1 pe thong dinga i 4 bon tabon*. Royal stamp of the peacock, 1865, 4th part of a coin to be used as one *pe* (64th part of a rupee = 1 *paia* (pice) or $\frac{1}{4}$ anna).

10. Lead: coin of Mindon Min. Obv. figure of a hare and *yon tasek tau*, 1231. Rev. *kyeni dinga i 4 bon tabon*. Royal stamp of the hare 1869: coin to be used as 4th part of a copper coin ($\frac{1}{4}$ pice or $\frac{1}{16}$ anna or 256th part of a rupee).⁶⁵

Fig 11. Hentha (goose) coin or spelter weight (*ex. coll.* R. C. Temple) procured in 1899. Phayre, *Numis. Orient.* coins of Aracan, Pegu and Tenasserim, 1832, Plate IV. no. 2, exhibits a

^{63a} This coin is described by Dr. Hanitsch, *J. R. A. S., Straits Branch*, No. 39, p. 199, as a token issued in Sumatra by the British E. I. Co. in 1831, having on the reverse "*adu lèping*, 1247." Specimens in B. M. bear dates from 1797 to 1833 and later.

⁶⁴ Only three Burmese Kings issued coined money—Bodaw-phaya (1781-1819); Mindon Min (1852-1878); Thibaw (1878-1885). They all copied the British metallic currency of India.

⁶⁵ Sangermano, *Burmese Empire*, ed. Tandy, 1833, p. 167, says the proportion of lead coin to the tical (=rupee) in Burma in his day (1781-1803) was 200: 1, but was at times as great as more than 1000: 1. There was a still smaller lead denomination which was "the 8th part of a copper coin", or 512th part of a rupee.

better specimen, which has an illegible debased Arabic legend on the reverse. He remarks (page 32) that *hentha*-ingot weights were common in Pegu. Phayre's specimen weighed $11\frac{1}{2}$ ounces and no doubt represents the *pānjara* (14 oz. standard) of Malay tin ingot weight. Phayre's Plate IV., fig. 3 shows a clear "cock" variety, with debased Talaing or Burmese characters on the reverse.

Plate V.

Figs. 3, 4 and 5: *ex. coll.* R. C. Temple. Figs. 1 and 2: *ex. coll.* Horniman Museum, Forest Hill, London.

Fig. 1. A *bālalang kīhīl*, small "mantis" tin ingot: value a *pānjara* or $6\frac{1}{2}$ cents: weight $17\frac{1}{2}$ oz., length 7 in. (*ante*, p. 92).

Fig. 2. A *kurakura kīhīl*, small "tortoise" tin ingot: value a *tampang* or 10 cents: weight $22\frac{1}{2}$ oz., length $4\frac{1}{2}$ in., breadth $2\frac{1}{2}$ in. (*ante*, p. 92).

Fig. 3. A *to* tin weight or coin from Mergui (*ante*, p. 118) with the eight-star, or Malay "palm," symbol on reverse. Phayre, *Nunis. Orient.*, Coins from Aracan, Pegu and Tenasserim, Plates III. and IV., gives several examples, some with Pali and debased Talaing and Burmese characters on reverse: *mahasukam nagaram* (City of great rest, apparently Kedah, see *ante*, p. 118 n. 55 and *infra*, Appx. III.) Phayre's Plate III., figs. 5-10 are small denominations, all showing debased *chaitya* on the reverse, and hence all Buddhist and from Burma. His figs. 8 and 9 show the transition to the *chīnthā*, lion, and his fig. 5 to humped bull.

The effigies of the *chīnthā*, lion, and the *to* have become so confused in the process of cutting moulds for metal castings for standard weights, just as have those of the *hentha*, goose, and the *siowso*, swift (see Pl. IV. 8, figs. 3 and 6) that they are hardly distinguishable. This will be seen by comparing the drawing of a *to* weight below with that of *chīnthā* weight on Plate IV., fig. 1. This confusion has been carried on into the Burmese coinage where the *to* has become a veritable lion. See Plate IV., figs. 7 and 9.



Tō-ke, "Lion" Weight of Burma.

Fig. 4. Tin "snake" weight or coin from Mergui (*ante*, p. 119) with debased Arabic characters on reverse, or what may be a date $\lambda | |$ = A. H. 811 = A. D. 1408. See also *ante*, p. 103, for another specimen from Tavernier, *Travels*, 1678, copied by Crawford, *Hist. Ind. Archipel.*, 1820, I., 253. It is quite possible that the "snake" weight is only a debased or "developed" *to*. Cf. Figs 3 and 4 on this plate, and the various developments of the *to* in Phayre's plates, *ante*, p. 123).

Fig. 5. Tin cock coin or perhaps counter, token or tally, from Mergui. Reverse has a badly inscribed Burmese legend which reads:— *thathenadaw* (in the year of) religion: date illegible. This is probably the tin coin from Mergui "about the size of a rupee" mentioned *ante*, p. 119, and also that recorded by Sangermano (*Burmese Empire*, ed. Tandy, 1833, p. 167) as current between 1781 and 1808:— "In Tavai and Mergui pieces of tin with the impression of a cock which is the Burmese arms⁶⁶ are used for money." Taking the ratio of tin to silver as 10 : 1, the value of this coin would be 5 cents of Malay money.⁶⁷

Plate VI.

All the figures are from Ridgeway's *Origin of Metallic Currency and Weights Standards*.

- Fig. 1. Coin of Salamis in Cyprus, showing lamb weight (p. 172).
- Fig. 2. An ancient Egyptian weighing with ox weights and rings (p. 128).
- Fig. 3. Coin of Oroesus, showing lion and ox weights (p. 298).
- Fig. 4. Lamb weights, Syria and Persia (p. 271).
- Fig. 5. Chinese hoe money (p. 23).
- Fig. 6. Assyrian duck weight (p. 245), which is perhaps a debased "bull's head" (p. 247).
- Fig. 7. A Jewish (P Assyrian) bull's head weight (p. 283).
- Fig. 8. An Assyrian lion weight (p. 245).
- Fig. 9. Chinese knife money (p. 157).

Plate VII.

Fig. 1 is a representation, from Plate LVII, of Cunningham's *Barhut Stupa*, of Anāthapiṇḍika dedicating the Jetavana (Jeta's park) to the Buddha, after having purchased it for a "layer of crores (of treasure)." See *ante*, p. 115. The scene shows Anāthapiṇḍika himself with a libation ewer in his hands, standing beside the holy mango tree surrounded by a Buddhist railing. It also shows the two, Gandhakutī and Kosambakutī, shrines built in the garden and the attendant crowd. In front of Anāthapiṇḍika is his treasurer tallying the contents of a bullock cart, which is in the process of being unladen. The bullocks have been taken out and are lying down. A basket of stamped ingots is being drawn off the cart by a cooly; another is carrying a basket of them on his shoulder and two others are spreading them over the ground under three sandal-wood trees. Every ingot is stamped with what appears to be a letter or figure.

Fig. 2. A half cash-tree, showing thirteen cash without the Raja's stamp at the top. The cash bear date 1314 = A. D. 1896.

(To be continued.)

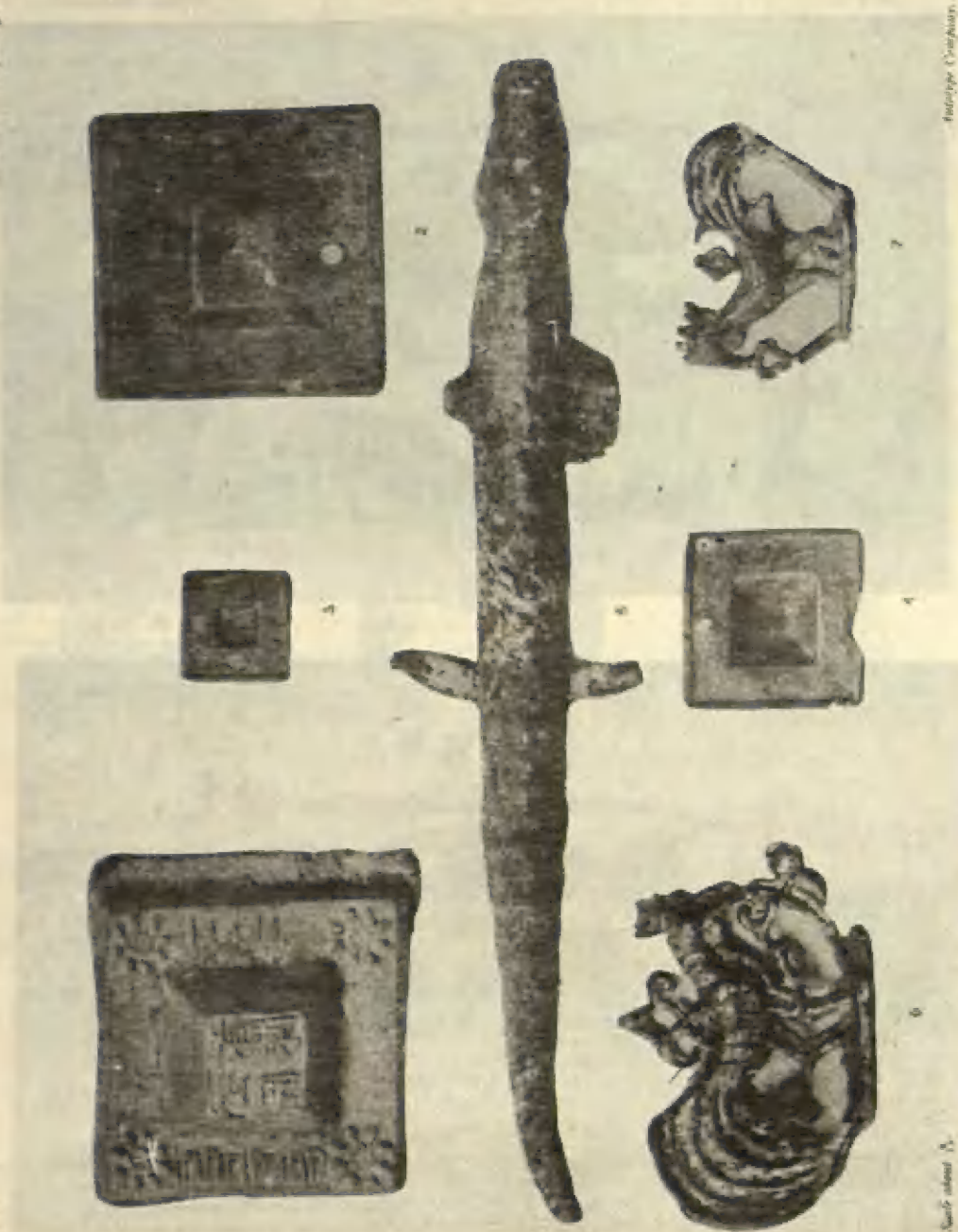
⁶⁶ Really the *henth*, goose.

⁶⁷ The Malay tin coin mentioned by Pyrard de Laval (*ante*, p. 102, n. 12) in 1602 was worth half a *bastardo* of Albuquerque, or 10 cents. That mentioned by Tavernier, 1678 (*ante*, p. 103), was worth 1 cent.

OLD MALAY CURRENCY.

Plate i.

Indian Antiquary.



Indische Oorlogsmuseum.

Nederlandsch Oorlogsmuseum.

OLD MALAY CURRENCY.

Plate II

Indian Antiquary



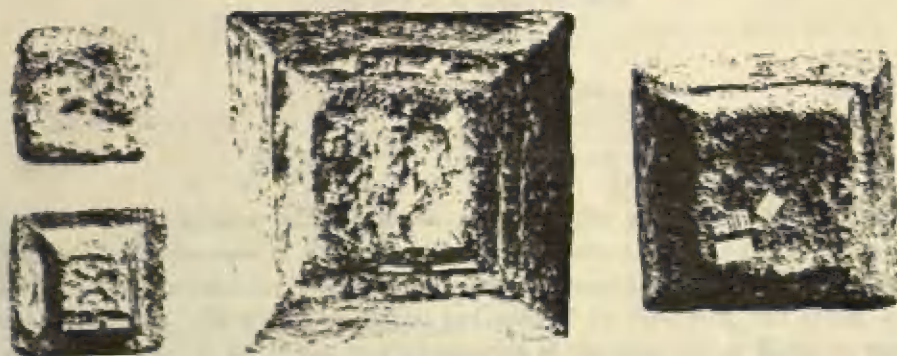
Fig. II.

Indian Antiquary

OLD MALAY CURRENCY.

Plate III

Indian Antiquary



(Sizes reduced from the originals.)

Archetype Company

THE OBSOLETE TIN CURRENCY AND MONEY OF THE
FEDERATED MALAY STATES.

BY SIR R. C. TEMPLE, BART.

APPENDIX I.

Correspondence.⁶³

No. I.

Mr. W. W. Skeat to Sir R. Temple, 13 March 1904.

The series is a most interesting one, as it includes a specimen of the Perak-Selangor "crocodile coin," the name of which (*sa-buaya*) is still used in reckoning small sums ($-2\frac{1}{2}$ cents). It is shaped like a crocodile with the tail slightly curved upwards, is made of tin and is several inches long. There are also several specimens of the fowl coin, also of tin, and cast in the shape of a cock. I am trying to get a specimen of the snake coin of Kedah to complete this series. There are also specimens of the solid tin coins [ingots used as coins] of Selangor and Perak, some of which weigh several pounds, and are copied in a similarly-shaped token series of Pahang, hollowed out to fit on to each other like hats.

I secured also two small gold coins from the East Coast with bulls on them, apparently not yet recorded, but in shape and size resembling some Sumatran coins; and finally a large and complete series of the tin cash of the various East Coast States, some of which have inscriptions in a script that I have not yet been able to get deciphered. A list of these coins was made out by Mr. [now Prof.] Rapson of the British Museum, who told me that the series was not in the Museum.

I should like to add that Prof. Ridgeway and I worked right through them, constructing tables of the various State currencies.

Some of the cash show symbols that reappear in old Javanese coins, notably a sort of "wheel ornament," and the unusual script may have some bearing on the same problem.

Besides the coins I have some "cash trees" (Mal. *pokok-pitis*) which show the method of making the cash.

No. II.

Mr. W. W. Skeat to Sir R. Temple, 10 June 1904.

The [tin] currency is all obsolete. Most of it has been so for two or three generations. It was only with the greatest labour that I could evolve order out of the chaos, or indeed find out anything about the ratio that the different coins bore to each other. All this is quite new, as is also the entire history of the development of the so-called "hat coin," whose shape is taken ultimately from the trade blocks of tin still in use. All this has never been touched before.

The crocodile coin took quite five years before I could run it to earth, and the cock coins are little if at all commoner. There was no proof till I got it that these things were ever used as currency at all. Even the Curator of the Perak Museum, from which State they came, told me that he had no idea of their use, and thought they were only toys. Both these and the 'snake' coin of Kedah—in fact the whole set—are surely entirely *sui generis*, and of the highest interest.

No III.

Mr. W. W. Skeat to Sir R. Temple, 30 June 1904.

1. I believe that there are two sizes of 'crocodile' coins, as there certainly are of the 'cocks.' I am trying hard to get further light from the Peninsula, without success so far.

⁶³ This contains original information on the subject gathered on the spot.

2. To the 'cock' coin series might be added an Achinese coin^{69a} of which I once possessed a specimen. It had a cock stamped on it, and is important because of the former relations of Achin with the Peninsula, as well as because their gold *dinar* in shape and execution rather reminds one of the gold 'bull' coins I found in the Peninsula.

3. These gold 'bull' coins should certainly I think be included in the animal series.⁷⁰

4. There might also be included two specimens of tin 'snake' coins from Kedah and Perak, of which I am trying hard to get specimens, and meanwhile send you tracing.⁷¹

If one could get coins stamped with the 'crocodile' it would be a great point. It also occurs to me that it would be as well to get hold of a full-sized Perak or Selangor tin block. I have seen them at tin-smiths' shops in England. The small blocks ('bat' coins) stand in a definite relationship to the big blocks, I feel sure. It is possible that the Batavia Museum has specimens of coins of the 'animal' kind, perhaps important ones.

NO. IV.

Mr. W. W. Skeat to Sir R. Temple. 21 July 1904.

I have just received an interesting letter from Mr. G. M. Laidlaw from Perak about some coins he has sent me, of which I am sending you a copy. It is of great interest to hear of the *gajah* and *būlalang* ('elephant' and 'praying mantis') coins, whose names were quite new to me. Of course they may turn out to be Malay nicknames applied to some of the less known European coins that were once used in the Peninsula, but anyhow it points clearly to the zo-omorphic tendency of this branch of numismatics.

You will welcome the little 'cock' coin that I send herewith,⁷² the inscription on which is *Tanah Malayu* or 'Malay land' above the 'cock' and *satu kēping* or 'one piece' with Arabic date on the reverse. I have seen these coins before, but imagined them to be Achinese.⁷³ I feel sure they are at least of Sumatran origin, as they are practically identical in respect of material, weight, size and general design, with other *kēpings* in this very lot, which evidently came from the British Settlement in Sumatra. They have such inscriptions as 'Island of Sumatra' in English^{74a} and 'Island of Sultana,' also in English.^{74b} I have also coins of Dutch and Friesian origin.

NO. V.

Mr. G. M. Laidlaw to Mr. W. W. Skeat. 14 June 1904. Written from Telok Anson, Lower Perak, Federated Malay States.

Your letter, asking for further information and fresh examples of tin coins, arrived just before I left on a down-river trip. I failed to get fresh examples there, but I have sent out by the Malay writers, and hope to have run some to earth when I get back to Telok Anson in ten days' time. I have tried to put my notes in order, but the results are meagre.

My earliest informant was Pa Lani bin Uda, the oldest native of Kota Stia. His information I have checked with other old men, both up and down river. I have, however, not really got

^{69a} Probably a token of the British E. I. Co. of 1831. See *ante*, p. 122.

⁷⁰ *Prima facie* they would be of Indian rather than of Malay origin.

⁷¹ *Vide* Plate IV.

⁷² Returned to Mr. Skeat, 23 July 1904.

⁷³ Common in Singapore and Malacca. Good specimens in the British Museum. See *ante*, p. 122.

^{74a} Dr. Hanitsch, *J.R.A.S.*, Straits Branch, No. 39, p. 198, describes them as copper tokens of the British E. I. Co. in Sumatra, dated 1804.

^{74b} The only explanation I can offer of this name is that it means Sumatra, or a part of it, perhaps Achin; in which case it should be read "Island of the Sultana" in reference to the long prevailing idea that Achin was governed by a Queen, owing to the fact that there were four governing Queens there in succession from 1641 to 1699. See Maruden, *Sumatra*, pp. 44 ff.

behind this coin currency. This table is practically that of Wilkinson, *Dict.*, p. 153, *s. v. tali*, with the addition of the *pénjuru*.

Sa (one) <i>pénjuru</i>	=	62½	<i>képing</i> or <i>duit ayam</i> ⁷⁵
Sa <i>piak</i> or <i>sa tali</i>		125	" "
Sa <i>suku</i>		250	" "
Sa <i>jampal</i>		500	" "
Dua ⁷⁶ <i>jampal</i> or dollar		1000	" "

Satu wang I was told was 36 *képing*⁷⁷ and the *piak*, which seems to have been a Perak term, was equal to 3½ *wang*. This equivalence is interesting, as it is not quite exact, being one *képing* out in comparison with the above table.⁷⁸ There were presumably no bullion brokers to call the coinage in those days. Wilkinson, (*Malay Dict.*) quotes Clifford's proverb, *sa tali tiga wang juga*, one *tali*, three *wang* too.⁷⁹

Another difference from Wilkinson, which also appeared was that the value of the *wang* had by no means been constant. It had been successively 1 : 14, 1 : 20, 1 : 28, 1 : 36. The change in the ratio had been effected by beat of gong.⁸⁰ The Raja Muda,⁸¹ who lives here, tells me he thinks the old record was lost in the trouble at the time of the Perak War, (1875).


Pa Lani said:—"wang tiada ubah, naik turun duit. Raja mahalkan sebab banyak duit Buggis masuk, the *wang* did not alter, but the *duit* went up and down. The Raja raised the price because many *duits* entered from the Celebes."

Down the river they were not accustomed to a bimetallic currency, but they met the depreciation of copper by an alteration in the ratio. The copper unit was the *duit* or *képing*. First came the *duit ayam*, 'fowl' *duit*, which was Raffles' Bencoolen coin, and equal to it was the *duit bunga tanjong*, 'flower of the Cape' *duit*. This I think is the coin described by Dr. Hanitsch, (*Collection of Coins from Malacca, Singapore, 1902, J. R. A. S., Straits Branch, No. 89, p. 198*) as having a sixteen-rayed star (? palm) on the reverse. There was also the *duit lorek*. This is the *képing* with the shield and inscription 'Island of Sultana,'⁸² a coin which Luerling said he had seen with the inscription 'Sumatra.'

The dollar had various names:—

<i>Ringgit mériam</i>	dollar	with the gun.
" <i>kain</i>	"	of cloth.
" <i>bérkain</i>	"	covered with cloth.
" <i>tua</i>	"	old.
" <i>gambar babi</i>	"	with (picture of a) pig.
" <i>rial</i>	"	real (Sp. dollar).

The only specimen I got was that of a *ringgit mériam*. I am sending all my *wang*, the best of the copper coins and the only other *gambar timah*, tin model,⁸³ that I have.

One of the old Friesian coins shows the 'lightning' in the lion's paw pretty well. The Dutch East India Company's *duit chabang*, *duit* with the fork, , latterly equalled the ordinary *duit ayam*, 'cock' *duit*, but formerly in Toh Bongko's time, say 1850, ten of these equalled one *wang*.⁸⁴

⁷⁵ 'Fowl' *duit*, or cash.

⁷⁷ See Maxwell, *Manual of Malay Lang.*, p. 142.

⁷⁸ This would give 108 *képing* to the *piak* or *tali*.

⁷⁹ *i. e.*, successively the number of *képing* to the *piak* rose from 49 to 70, 98 and 126, by administrative order.

⁸¹ Heir Apparent.

⁸² 'Animal currency

⁸⁰ Double.

⁸¹ 126 *képing* to the *piak* in place of 125.

⁸³ See *ante*, p. 126.

⁸⁴ Giving yet another ratio of 85 *képing* to the *piak*.

The *tampang* another informant said was current at ten *sen*, the *sen* (cent) being equal to ten *duit*. This however only showed a later equivalence with the *kupang*. It was stated to be a Selangor measure.

The only tin equivalences I could get were that the *buaya*, 'crocodile', was worth 50 *duit ayam*, that two *buaya* made one *tampang*, and that the *bidor* equalled the *suku* (quarter dollar). "*Datoh mēndēndakan orang 100 bidor*, the Chief fined the people 100 *bidor*," which was equivalent to 25 dollars.⁸¹

"The people in Pahang used gold coins *kēndēri*, *busok*, *lada*, *mayam* (the big one)." Ratios I could not get. "They used the tin *tampang* and *kōping*," but here again ratios were not forthcoming. "They did not use the *bidor* or *buaya*." Perak seems to have used the *gambor*, *batilang*, *ayam*, *buaya*, *gajah*⁸² and *bidor*. So far I have not got behind "*ta' tau*, don't know."

Possibly something can be made out of the following table of weight which I have pieced up from a string of statements made by Pa Lani. The last has a slight discrepancy which shows that the verbal equivalent was out by 2½ kati.⁸³

sa ⁸⁷ pēnjuru		= 10 tahl ⁸⁸
dua pēnjuru	= sa piak	= 1 kati 4 tahl [1½ kati]
ēmpat pēnjuru		
= dua piak	= sa suku	= 2½ kati
lapan pēnjuru		
= ēmpat piak		
= dua suku	= sa jampal	= 5 kati
16 pēnjuru		
= 8 piak		
= 4 suku		
= 2 jampal	= sa ringgit	= 10 kati of tin
2 kōping (slabs)		= 75 kati
4 kōping	= tengahdua ⁸⁹	
	pikul	= 150 kati
8 kōping	= sa bahara	= 300 kati ⁹⁰
2 kōping 5 jampal	= sa pikul	= 100 kati
7½ jampal	= sa kōping	= 38½ kati ⁹¹

The *bidor* or *suku* (quarter dollar) will go into this "bullion currency," but the crocodile of which 20 went to the dollar will not.⁹²

⁸¹ This provides a scale:

50 duit ayam	= 1 buaya	= 5 cents
2 buaya	= 1 tampang or kupang	= 10 cents
2½ tampang	= 1 suku	= 25 cents
4 suku	= 1 dollar	= 100 cents

It shows also that 1,000 duit ayam or *kōping* went to the dollar, and thus provides the required equivalence between the silver dollar money scale and the tin currency scale above stated, as in either case 1,000 *kōping* went to the upper unit of the scale.

⁸² Models of praying mantis, fowl, crocodile and elephant.

⁸³ Should be 1½ kati: see table below.

⁸⁷ sa = one: dua = two: ēmpat = four: lapan = eight.

⁸⁸ 16 tahl = 1 kati.

⁸⁹ That is one and a half pikul = 150 kati: therefore 1 pikul = 100 kati. Three pikul = one bahara.

⁹⁰ The kati is 1½ lbs: therefore the bahara is 400 lbs., or the remodelled British weight.

⁹¹ An error of 1½ kati as the *kōping* (slab) should on this table consist of 37½ kati.

⁹² See ante, p. 90. Because the above table represents the old Dutch scale, which works out at 6½ cents to the pēnjuru, and the *buaya* of 5 cents is reckoned on the modern British scale.

This is very little, but I hope still to get some of the missing links.⁹²

2 buaya = 1 tampang

5 buaya = 1 bidor or suku

4 bidor = 1 dollar of 10 kati

No. VI.

Mr. G. M. Laidlaw to Mr. W. W. Sheat. 29th July 1904.

Written from Telok Anson, Lower Perak.

I have been able to meet with several *buaya*, but I have not been able to make their owners part with them. So I have tried to make them lend them me till I get them photographed. The first photograph was a failure, so after some days I had others taken. I do not yet know with what success.

I am sending the *ayam* referred to in my last letter, and also, what is of greater interest, an old *ayam* and *gajah* found at Pasir Panjang Laut some eight feet below the present surface in making a new well. They were given me by the finder, Mat Nor bin Bilal Yop. I could get no information out of him.

From an old man at Setiawan I got the following facts—by name Haji Mat Said bin Sheikh Hunsin. In the time of Marhum⁹³ Sebrang Bandar, the ratio of the *duit ayam* to the *wang* was 14:1. In the subsequent changes, other ratios of 20:1, 28:1, 36:1 were made in the time of Marhum⁹⁴ Durian Sabatang. I will try and get the *sanat* (date) of the reigns. It seems that the dowry of the mythical princess Tanjong Bueh was 1000 *bidor*.⁹⁵

While he said that the *bidor* equalled the *suku*, he also said that the *buaya* equalled the *pénjuru*, i.e., 16 went to the dollar.⁹⁶ Other informants give the ratio as 20 to the dollar.⁹⁷ Two *buaya* equal one *gajah*.

It seems that ten *kati* of tin were worth one dollar.⁹⁸ This level was known, whenever it was reached, as *sa-surup* or *samurup*. In other words the bimetallic currencies of tin and silver were at par whenever tin was 30 dollars per *bahara*.

The weight of the *kati* was the same as that of four score dollars (*empat lekor ringgit*), whereas it is now equal to two score (*dua lekor*).⁹⁹

At Janggor, the first district opened up, in Butang Padang, 8 *képing* went to the *bahara*, while in Butak Rabbit (practically Telok Anson) perhaps only 6 went to the dollar.

I came across an old trader named Imam Haji Mat Arshat bin Imam Bugis. He did a lot of trading in the bad old days up the Kinta Valley. He said the *képing* (slab) was worth four dollars, less one *suku*, or 37½ *kati* of tin,¹⁰⁰ when tin was at par (*samurup*); i. e., when tin was at ten *kati* to the dollar. At the same time this level was very rarely reached at Butak Rabbit, although he was able to do satisfactory business on the following basis up country. A *pitis*

⁹² This was, however, not possible, as the tin animal currency corresponded with the old Dutch scale, and the scale Mr. Laidlaw was trying thus to get matched was the modern British scale.

⁹³ The late.

⁹⁴ That is, 250 dollars of tin at 10 *kati* the dollar.

⁹⁵ That is, this man was quoting the old Dutch scale, making the *buaya* = 6½ (not 5) cents.

⁹⁶ Probably confusing the *buaya* of the tin currency with the *buaya* of British silver money.

⁹⁷ This is the approximate historical ratio.

⁹⁸ A dollar weighs 416 gra. and this statement gives therefore 33,250 gra. as the weight of a *kati* of tin. The standard worked out at p. 91 cents, makes the weight 3120 × 10½ = 37,260 gra. The reduction of the ratio of tin and dollar to half the above is due to depreciation of silver. It may be noted here that the terms *empat lekor* for four score, and *dua lekor* for two score are unusual, and probably dialectic: ordinarily they would mean 24 and 22 respectively.

¹⁰⁰ That is, 3½ dollar of 10 *kati* = 37½ *kati* to the *képing*.

was worth ten *duit ayam*, and ten *pitis* were worth one *gambar ayam*.¹ He traded his rice up country at the rate of five dollars to the *gantang*.² From this basis I got the very unsatisfactory statements which follow :—

1 gambar ayam kēchil	fetched	1 chupak of rice
1 gambar ayam bēsar	"	2 chupak "
1 gambar bēlalang kēchil	"	1 chupak "
1 gambar bēlalang bēsar	"	1 chupak and 1 kal ³
1 gambar buaya kēchil ⁴	"	1 chupak

The small crocodile was worth five *pitis*, which gives 50 *duit ayam* or 20 to the dollar.⁵

It appears that 8 *kēping* might weigh 3 *pikū* 20 *kati*; that is, be 20 *kati* out.⁶

He said that

the tortoise (<i>kekura</i> or <i>kurakura</i>)	was worth	3 <i>piak</i> (<i>talī</i>) ⁷
the middle sized crocodile (<i>buaya pēnngah</i>)	" "	5 <i>talī</i>
the small crocodile <i>buaya</i> (<i>kēchil</i>)	" "	1 <i>pēnjuru</i>
the small mantis <i>bēlalang</i> (<i>kēchil</i>)	" "	1 <i>pēnjuru</i>
the small cock (<i>ayam kēchil</i>)	" "	1 <i>pēnjuru</i>
the large cock (<i>ayam bēsar</i>)	" "	2 <i>pēnjuru</i>

At the same time there were crocodiles as large as half a *kēping* (slab), and there were mantises worth 3 *pēnjuru*.

He said that these coins were made to order by any bellows-smith (*tukang pēngēmbus*) or magician (*paowang*), and that they were made for ornament, not use.⁸

The oldest native I have met, *Tukang Awang* of *Pulan Tiga*, a man who "can remember ten Sultans," and was 15 years old in the time of *Marhum Jabut*, could give me no information beyond the *duit ayam* currency. He, however, had never been in a tin district.

I send herewith a photograph of some of these coins. Better photographs to follow. Notice the *bēlalang* (mantis) in the second row,⁹ also in the foreground the primitive *Pasir Panjang* Laut specimens sent you. The oval shell-backed casting is a *jengkong*. That is, the *sulong relau*, eldest born or firstling of the smelting-house; or *sulong klian*, eldest born of the mine.

¹ Here *duit ayam*, 'cock' *duit* = 'cash' (money); *pitis*, ordinary 'cash' = cent; *gambar ayam*, model of cock (tin currency). This gives 1000 cash to the dollar.

² Unit measure of capacity: 2 *kal* = 1 *chupak*; 4 *chupak* = 1 *gantang*.

³ Stevens, E. I. Trade, p. 87, makes the *caul* or *kal* of Achin to be about $\frac{1}{2}$ *gantang*.

⁴ *gambar* = model; *kēchil* = small; *bēsar* = large; *ayam* = cock; *bēlalang* = mantis; *buaya* = crocodile.

⁵ This is a wrong assumption, these 'crocodiles' were clearly 16 to the dollar, as the informant was speaking of the Dutch not the British scale. The sense of this statement is explained, *ante*, p. 96.

⁶ The trader was, however, here referring to the *shara* of 420 lbs. which was the standard for the animal currency, see *ante*, p. 90.

⁷ This table shows, in terms of tin currency at the standard of 420 lbs. to the *shara* :—

crocodile	} of 1 <i>pēnjuru</i>	= 14os.
mantis		
cock		
mantis	of 3 <i>pēnjuru</i>	= 42os.
tortoise	of 6 <i>pēnjuru</i>	= 84os.
crocodile	of 10 <i>pēnjuru</i>	= 140 os.
crocodile	of $\frac{1}{2}$ <i>kēping</i> (slab)	= 26½ lbs.

Other observations are that the whole is on the Dutch scale of the great *ris* (5½ lbs.). The tortoise represents the great *ris*; the mantis the half-great-*ris* or *talī*.

⁸ Thus perpetuating a clear error.

⁹ It is however clearly a crocodile; Plate II. fig. 2, no

They were usually cast in duplicate and were used for the *tiang sèri* (central pillar) in front of a house,¹⁰ and were bequeathed as heirlooms (*herta pēsaka*).

The evidence is quite against the chief having the prerogative of casting the coins. The names and actual mines and dates of the *hejira*, 1280 and 1275,¹¹ of one elephant and one crocodile were given.

In 1252¹² the price of tin was theoretically at the level of 30 dollars per *lahara*. The price subsequently rose, though the old price could still be got in the case where a long credit of three months was given.

The average size of the crocodiles in the illustration is twelve inches and the maximum twenty. The average elephant was nine and the cock three by two.

NO VII.

Mr. W. W. Skeat to Sir R. Temple. 6 September 1904.

From the letters received from Mr. G. M. Laidlaw of Perak, and the accompanying photograph,¹³ which came from the same source, you will see that the "animal" currency of Perak is a more elaborate affair than I at first supposed. Laidlaw has sent me in addition to the photograph one or two more *ayam* or "cock" coins, and a *gajah* or "elephant" coin, whilst the photograph shows several more *gajah*, a number of crocodiles and a tortoise (*kurakura*),¹⁴ with none of which could the owners be persuaded to part.

The *gajah* sent me is noticeably different from the others shown in the photograph. It is far smaller, has bent legs, very short snout, no ears to speak of and no saddle. So evidently it must be an *anak gajah*, or young elephant, intended to represent an amount of lesser value.¹⁵

Laidlaw also mentions a *ḍālalang* ("praying mantis") coin, of which he could not purchase a specimen. If it occurs in the photograph it is probably the long thin coin, under the topmost "cock," though I should say that it was really (despite its name) nothing more than a degenerated "crocodile."¹⁶

The fact that the "elephant" sent me was buried some feet deep—as are many other specimens of tin currency in the Malay Peninsula—argues for its long continuance in the land, if not for its validity.

The "tortoise" exactly resembles an ordinary piece of smelted tin, with the addition of head and flappers.¹⁷ At first one would naturally expect that the "animal" currency would represent only animals that had a distinct barterable value; *e. g.*, fowl, goat, cattle, etc. But the introduction of the crocodile—as to the use of which as a coin there is more ample evidence than in the case of any of the others—shows that this was not the underlying motive: or at least not the sole one. Whatever the motive was, there is ample evidence to prove the use of the "animal" as currency, and this evidence receives the most practical corroboration from the arrangements for stringing these coins together, like cash. See the hole at the top of the "cock" coins and over the nose of several of the "crocodiles."

NO. VIII.

Mr. W. W. Skeat to Sir R. Temple. 11 September 1904.

No specimen of the *ḍālalang* (praying mantis) coin has yet been obtained, nor even a large "elephant." Only one "crocodile" is to hand and no *kurakura* or tortoise, if any indeed are obtainable.

¹⁰ The *tiang sèri* is really the first pillar or house-post planted in the ground.

¹¹ A.H. 1275 = A.D. 1850; A.H. 1280 = A.D. 1855.

¹² See Plate II.

¹³ A.H. 1252 = A.D. 1833.

¹⁴ This is the *jongkong*, *vide* p. 130.

¹⁵ Is this meant to represent the *babi* or pig? Cf. ante, p. 127, the *babi* or "pig" dollar current in some of the States.

¹⁶ In the description of Plate II. fig. 2, No. 2, it has been classed as a *bunya* or "crocodile," which it undoubtedly is.

I am sending a second pull of the first photograph. I also send you a second photograph, showing the various pieces in different positions, which will therefore be useful. I imagine they have been printed as dark as possible to facilitate reproduction.¹⁷

No. IX.

Mr. W. W. Skeat to Sir R. Temple, 7 November 1904.

I send a set of photographs of the tin currency in my collection at the Cambridge Museum.¹⁸ The specimens have each been taken separately. Note that which is described in the Curator's report as possessing ridged markings on the side. This coin belongs to a slightly different type, the sections lacking the usual step and curving upwards to the top :

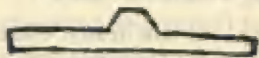
thus  as against the usual 

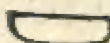
Two of the faces have the curious ridged markings already mentioned ; one resembling the Roman numeral II and the other IIII. The top of this specimen is marked by a cross, which corresponds to the usual *tampok manggis* (mangosteen rosette), as it is called in Malay. The photographs are half size.

No X.

Mr. W. W. Skeat to Sir R. Temple, 7 March 1907.

Dr. Harrison of the Horniman Museum (Forest Hill, London) was sent round to me from the British Museum in connection with two specimens of the tin currency found there. I asked him for photographs and he has courteously sent me the enclosed, recording in each case the weight and dimensions. No. 1 is a *gambar bitalang* or *mantis* ingot. The disposition of the wings, shape of the head and eye, and the segmentation of the tail part of the body are all very clearly marked. No. 2 is, I take it, a *gambar kurakura* or tortoise ingot, showing the shell marks. Both are of bright new tin, as fresh as when first cast. There seems to me a possible connection in shape between the *mantis* and the long tin slab (*képing*)

 and also between the tortoise and the round tin piece (*jongkong*)

 shaped like a rather flat bowl, into which form the superfluous tin is still cast in the Malay Peninsula, when there is insufficient metal left over at the smelting to form a slab.

(To be continued.)

THE INSCRIPTION OF ARA.¹

BY PROF. H. LÜDERS, Ph.D.; BERLIN.

THE Kharoshthi inscription treated here was discovered in a well in a *ndid* called Ara, 2 miles from Bāgnilāb. It is now in the museum at Lahore. Mr. R. D. Banerji was the first to bring it to our notice. In publishing it (*ante*, vol. XXXVII, page 58), he expressed the expectation that I should succeed in completely deciphering the text. I regret that I am not able wholly to respond to the expectation. The last line of the inscription remains obscure though the script is here partly quite clear. I believe, however, to have been able to read so far the remaining portion of the inscription with the help of the impression which I owe to the kindness of Dr. Fleet², that at the most there will remain doubt as regards the two names in the fourth line.

¹⁷ These two photographs form Figs. 1 and 2 of Plate II.

¹⁸ Plates I. and III.

¹ Translated by Mr. G. K. Nariman from the *Sitzungsberichte der Preussischen Akademie der Wissenschaften* 1912, pp. 824 ff., and revised by the author.

² It is the same after which the phototype has been reproduced in this Journal.

In order to show what I owe to my predecessor I reproduce here his reading of the text of the inscription. I consider it superfluous to go into every point in detail in which I differ from him: in most cases an inspection suffices to determine the text. Let me, however, make one observation: Banerji believes the inscription to be broken towards the left end, and that the final words of all lines except the first are missing. This assumption is wholly without foundation. Only the last line is incomplete at the end. Banerji reads:—

1. *Maharajasa rajatirajasa devaputrassa pa(?)thadharasa*
2. *Vajshhkaputrassa Kanishkassa sambatissarā eka chatari(ka)*
3. *saṃ XX. XX. 1, Chetasa māsaṃ dīva 4, 1 atra divasami Namikha*
4. *. . . . na pusha puria pumana mabarathi Ratakhaputa*
5. *atmanasa sabharya putrassa anugatyarthas saṃva*
6. *. . . . ras himachala. Khipama*

I read:—

1. *Maharajasa rajatirajasa devaputrassa [ka]i[sa]rasa¹*
2. *Vajshhkaputrassa² Kanishkassa sambatissarā³ ekachapar[i]*
3. *[sas]⁴ saṃ 20 20 1 Jethasa masasa di 20⁵ 4 1 i[te] divasachhuvami kha[n]e⁶*
4. *khupe [Da]shasara⁷ Poshapuriaputrassa matarapitarassa puya-*
5. *e Namda[sa sa]bharya[sa⁸ sa]putrassa anugraharthas sarva . . [pa]na⁹*
6. *[ja]tisha hita¹⁰ ima-chala | khipama¹¹*

1. To the reading of this word we shall revert later on.

2. The second *akshara* can in my opinion be only *jhe*; the reading *si* is at all events excluded. As regards the reading of the third *akshara*, there may be different views at first sight. As *shka* occurs in the name of Kanishka, Vāishka, Huvishka, and as exactly the same symbol occurs in the Zeda inscription in the name *Kanishkassa*, one might feel tempted to read *shka*. On the other hand *shpa* is suggested by the fact that in the ligature *shka*, in the word *Kanishkassa* which follows immediately after, the *ka* is joined to the *sha* in a different way. But, I think, we shall decide for *shka* when we take it into consideration that in the Kharoshthī script the same symbol on the same stone shows often widely different forms.

3. I have already given the correct reading of the date of the year in Jour. R. As. Soc., 1909, p. 652. The ligature *tia* is not new as Banerji thinks. It occurs, not to mention uncertain cases, in the word *samvatsaraye* in the Taxila inscription of Patika (*Ep. Ind.* 4, 54; Bühler: *samvatsaraye*), and in the Mahābān inscription (Jour. As. IX, 4, 514; Senart: *samvatsaraye*), and in *bhettiti* and *matiana* in the MS. Dutreuil de Rhins, as was shown ten years ago by Franke (*Pāli and Sanskrit*, page 96 f.)

4. The *i* of *si* is not clear.

5. After the symbol for 20 there is a hole in the stone.

6. The *n* has crumbled away. The sign for *e* is attached below as in *de* in line 1, in *e* generally, and probably also in *se* in line 4.

7. The *da* is uncertain.

8. The *sa* at the end of the word and the following *sa* are not quite distinct, but perfectly certain.

9. The *akshara* after *sarva* is totally destroyed, and the *pa* is uncertain. Shall we read *sarvasapaga*?

10. The *hi* is not certain.

11. After *khipama* there are three or four illegible *aksharas*.

Translation.

"(During the reign) of *Mahārāja, Rājātirāja, Devaputra, Kaisara* Kanishka, the son of Vajshhka, in the forty-first year,—in the year 41,—on the 25th day of the month of Jetha (*Jyāishtha*), in this moment of the day, the dug well of the Dashaveras, the Poshapuris sons, for

the worship of father and mother, in order to show favour to Nampda together with his wife and his son, and to all beings (?). For the welfare of these (T)"

The inscription reports the sinking of the well in which it was found, by a number of persons who called themselves Dashaveras, if that name has been correctly read, and who are further characterised as Poshapuriaputra. Since it is said later on that the work was undertaken for the worship of father and mother, Dashavera can only be the family name indicating here a number of brothers belonging to it. The expression "Poshapuriaputra" one would be at first sight inclined to understand as "sons of Poshapuris"; but Poshapuris would be a very strange personal name. I therefore believe that *putra* is here employed in the frequently occurring sense of 'member of,' 'belonging to,'* and that Poshapuris is derived from the name of the city of Poshapura, which is equal to Purushapura, the modern Peshāwar. As for the form *posa* it can be authenticated from Pāli writings.

*Khaṇe*⁵ is no doubt derived from *khan* in the sense of "dug"; whether it is an adjective or a participle (Sk. *kṣāta*) should be left an open question. *Khaṇe kupe* seems to have been used as a contrast to the natural fountains. The expression is of interest inasmuch as it enables us to explain a passage in the enigmatical inscription of Zeda. There occur after the date *saṃ 10 1 Aśhadasa masasa di 20 Utaraphaguna iṣe chhupami*, the characters which Senart⁶ reads: "[bha]-nam u[ka] chasa ma kasa Kanishkasa raja[mu] [dadabha] de[na] mukha"; and which are read by Boyer⁷ as: "*khanam uspham : . chasa mardakasa Kanishkasa rajami [to] yadalabhai danamukha.*" Now the impression before me clearly shows that the three first *aksharas* of this passage are exactly the same as those following the date in our inscription. Even the *e* of *na* is joined to the *m* in exactly the same way as here.⁸ That the fourth character is neither *ka* nor *spha* but *e*, can now hardly be disputed.⁹ The words thereafter I read as: *Veradasa mardakasa*. They are pretty clear in the impression except the second *akshara* which may as well be *ro*. As regards the five *aksharas* coming after *rajami*, I can for the present only say that they can in no case be read as *toyadalabha*. Therefore the reading that we get is: *khaṇe kupe Veradasa mardakasa Kanishkasa rajami i danamukha*. The form *kupe* instead of *kups* is found also in the Paja inscription¹⁰ and in the Muchai inscription.¹¹

Much more important than the contents proper of the inscription is its date. Until now the numerous dates of the inscriptions of the Kushana period presented no difficulty at least in so far as the succession of the kings is concerned. They yielded for Kanishka the years 3-11, for Vāsishka 24-28, for Huvishka 33-60, for Vāsudeva 74-98. Here we suddenly find Kanishka in the year 41.

To explain this contradiction it may be alleged that in the text of the inscription we find nothing to show that Kanishka was on the throne in the year 41. *Kanishkasa sambatīaras skachaparīsas* literally means "in the year 41 of Kanishka", and one might find in it the sense, "in the year 41 of the era founded by Kanishka". Now it is self-evident that the combination of the number of a year with the name of a king in the genitive case originally indicated the year of the reign of that king but I need cite no instance to show that later on in a similar way people combined the names of the reigning king with the number of the year of the current era; and

⁵ The final portion is not clear to me.

⁶ Compare *v. s.*, *niṣamaputa* in the Bhāṭṭiprōṭa inscriptions and other instances. ZDMG. 58, p. 698 f.

⁷ I adhere to the usual transcript of the two *na* signs without expressing that I consider them as absolutely correct.

⁸ *J. As.* VIII. 15, 137.

⁹ It seems that both Senart and Boyer have regarded the right hook of *ku* as a portion of the preceding symbol. Otherwise I am unable to explain the reading *nam u*.

¹⁰ See my remarks *Jour. R. As. Soc.* 1909, pp. 647 ff.

¹¹ *Ants.* 37, 65.

¹² *Ibid.* 37, 64; *Jour. R. As. Soc.* 1909, 664.

that must be also the case here. Kanishka receives here his whole title, and even a statement about his descent is added. And people generally do not speak in this fashion about a king that was long dead especially when they are silent as regards the name of the reigning king. That explanation, therefore, seems to me out of the question. Another possibility is afforded by the assumption that Kanishka was a contemporary ruler of Vāsishka and Huvishka. Banerji has expressed this view. Accordingly Kanishka, between the years 10¹² and 24, would have handed over the rule of India to Vāsishka, who afterwards was succeeded by Huvishka, and himself confined his rule to the northern part of his empire. This does not appear to be probable, because all other sources are silent. We should above all expect that in the titles of Vāsishka and Huvishka there should appear an indication of a certain relation of dependence. But in the inscription of Īśāpur and Sānchi, Vāsishka bears the title of *mahārāja rājātirāja devaputra śāhi*.¹² That for Huvishka up to the year 40 only the title of *mahārāja devaputra* can be ascertained as far as the inscriptions go, is probably a matter of accident. In the inscription of the Nāga statue of Chagāon of Sam 40¹³ and in the inscription of the Wardak vase of Sam 51¹⁴, we find that he is called *mahārāja rājātirāja*, and in the Mathurā inscription of Sam 60¹⁵ *mahārāja rājātirāja devaputra*. Under these circumstances, it seems to me more probable that the Kanishka of our inscription is not identical with the celebrated Kanishka. I lay no stress on the fact that Kanishka here bears a title which is not applied to him anywhere else. But the characterisation as the son of Vājshesha, which too does not appear anywhere else, gives an impression, to me at least, that it was added with a view to differentiate this Kanishka from the other king, his name-sake. Now the name Vājshesha or Vājshesha sounds so near Vāsishka that I look upon both forms only as an attempt to reproduce in an Indian alphabet one and the same barbaric name.¹⁶ These two forms at any rate are closer to each other than, for instance, the various shapes in which the name of Huvishka occurs in inscriptions and on coins. Now, cannot the Kanishka of our inscription be the son of the successor of the great Kanishka? He would be probably in that case his grandson, which would well agree with the name, because grandsons are, as is well known, often named after the grandfathers. The course of events then would be something like this. Kanishka was followed by Vāsishka between the years 11 and 24. After Vāsishka's death, which occurred probably soon after Sam 28¹⁵, there was a division of the empire. Kanishka II took possession of the northern portion of the kingdom. In India proper, Huvishka made himself king. The reign of Kanishka II endured at least as far as Sam 41, the date of our inscription. But before Sam 52 Huvishka must have recovered the authority of the northern portion of the empire, for in this year he is mentioned as king in the Kharoshthī inscription which was found at Wardak to the south-west of Kābul.

I do not misapprehend the problematic nature of the construction I have proposed; whether it is correct will depend on further discoveries for which we are fortunately justified in entertaining hopes.

The inscription which presents us with so many new difficulties carries us, however, in my opinion, by means of one word further towards the solution of a question which for the last few

¹² This is the date of an inscription in the British Museum which apparently was found in the country about Mathurā, (see *Ep. Ind.* IX. 239 ff.)

¹³ *Jour. R. As. Soc.*, 1910, 1313; *Ep. Ind.* II. 369.

¹⁴ VOGEL, *Catalogue of the Archaeological Museum at Mathura*, p. 88.

¹⁵ *Jour. R. As. Soc.*, XX. 255 ff.

¹⁶ *Ep. Ind.* I. 385.

¹⁷ *JA* and *z* may have been used to express a *z*; compare the writing *JAellasa* in Kharoshthī by the side of *ZQIAOY* on the coins of Zoilos (Gardner, *Coins of Greek and Scythic Kings in Bactria and India*, p. 321., 170). It need hardly be noted that the notation *e* or *i* before the *sh* makes no difference.

¹⁸ In case the Mathurā inscription (*Ep. Ind.* II. 205, No. 26) is dated in Sam 29 and in the reign of Huvishka.

years has considerably occupied Indian historical research. This word is the fourth title of Kanishka which I read as *kaisarasa*. This reading appears to me to be absolutely certain, although the upper portion of some letters on the stone have been injured. Banerji read it *pa(?)thadrasa*. I must at once concede that the first *akshara* can be *pa*. But it is equally possible that the upper portion of the symbol has been broken away, just as has been the case with the preceding symbol which undoubtedly is *sa*. In that case the *akshara* can only be *ka*. The second *akshara* can be nothing but *i*. The hook at the top of the symbol is perfectly visible in the impression and makes the reading *tha* impossible. Of the third *akshara* only the lower portion has been preserved. Comparing the remnant with the last *sa* of the word, one can have no doubt but that it was a *sa*. The lection *dha* is simply impossible. The two last *aksharas* are manifestly *rasa*. Thus we can either read *paśarasa* or *kaisarasa*; and it is obvious that only the latter can be the right reading.

The title of *kaisara* has not up to now been traced to Indian soil, and it would be incredible if we had to deal with a national dynasty. But the Kushana kings drew their titles from all parts of the world. They call themselves *mahārāja*: this is the genuine Indian title. They call themselves *rājātīrāja*: this obviously is the translation of the Middle Persian royal designation *šāhanshāh* which we meet with on the coins of Kanishka, Huvishka, and Vasudeva. The third title *devaputra* is, as has been long known, the rendering of the Chinese *t'ien-tzu*, 'son of heaven.' And now to these has been added the Roman appellation of Caesar. It may be asked: why this heaping up of epithets? For this too we have an answer: These were calculated to mark the monarch as the lord of the whole world. *Mahārāja* is the king of India, the ruler of the South. As against him we have *rājātīrāja*, the king of the Northern country. That properly speaking Iran lies to the North-West of India, and not exactly to the North, need not be considered as prejudicial to our explanation, inasmuch as we have to deal here with the cardinal points in a general way only. The term *devaputra* marks the ruler of the East. To him is opposed the *kaisara* or sovereign of the West. Thus the Kushana king is a *sarva-lokaśvara*, as runs the title on the coins of the two Kadphises. This idea appears to be an Indian one. I need only call to mind the *digvijaya* which was the ideal and aspiration of every Hindu ruler. In this connection there is an interesting passage in the Chinese translation of the *Dāśavīkharasūtra* of A. D. 392. I quote it according to the version of Professor Sylvain Lévi.¹⁰ In the *Jen-feou-ti* (Jambudvīpa) there are . . . four sons of heaven (*t'ien-tzu*). In the East there is the son of heaven of the Tsin (the Eastern Tsin 317-420); the population is highly prosperous. In the South there is the son of heaven of the kingdom of *T'ien-tchou* (India); the land produces many celebrated elephants. In the West there is the son of heaven of the *Ta-ts'in* (the Roman Empire); the country produces gold, silver, and precious stones in abundance. In the North-West there is the son of heaven of the *Yue-tchi*; the land produces many good horses." This passage is almost a commentary on the significance of the royal titles in our inscription.

We have seen above that there is some doubt as regards the personality denominated here as *kaisara*. It is immaterial to the chronological inference which we may draw from the use of these titles. No one will deny that this inscription dates from the Kushana period and its date *Sam* 41 belongs to that series of dates which run from 3 to 98. The beginning of the era which the reckoning has for its basis is uncertain. The theory which was advanced first by Cunningham that the Kushana era is identical with the Mālava-Vikrama era of 57 B. C. has found in Dr. Fleet an energetic defender. Professor O. Franke has attempted to support and I too have agreed to it. But the word *kaisara* overthrows this hypothesis. The idea that so early as in the year 16 B. C. a Central Indian or Indian ruler should have assumed the title of Caesar is naturally incredible. With the possibility of transferring the beginning of the era, and con

¹⁰ *Jour. As.* IX 3, 24, note.

sequently Kaṇishka, to pre-Christian times falls likewise the possibility of placing the succession of kings from Kaṇishka to Vāsudeva before Kujula-Kadphises²⁰, whose conquests, according to Professor Ohavannes²¹ and Professor Franke,²² took place in the first post-Christian century. In these respects I am now entirely at one with Professor Oldenberg, who has recently treated the whole problem in a penetrating way.²³ The exact determination of the era however depends before all on the question whether we should identify the king of the Ta-Yüeh-chi, Po-t'iao, who sent in the year 229 A. D. an embassy to China, with Vāsudeva, the successor of Huviabka.²⁴ In that case the era would start at the earliest with 130 and at the latest with 168 A. D. None of the grounds which Oldenberg has adduced against this supposition is decisive. On the other hand, the identification of Po-t'iao with Vāsudeva is, as observed by Ohavannes, merely permissible and not necessary; besides there still remains the possibility that a later and another Vāsudeva is meant. Accordingly a *consensus omnium* can hardly be attained at once, and final decision will vary according to the evidential value attached to the Chinese data. Our inscription has, however, perceptibly narrowed the bounds of the possible, a fact the value of which, under the prevailing circumstances, is not to be underestimated.

Postscript.

After I had already written the above paper, I received the July number of *Jour. R. As. Soc.* containing the first half of the essay by J. Kennedy, on the "Secret of Kaṇishka." The author supports the theory of Fleet and Franke. So far as I see there is nothing in the essay which invalidates the clear evidence of our inscription. This is not the place to enter into details; only one word I shall say regarding the argument upon which Kennedy seems to place chief reliance. Kennedy argues thus (p. 667):—"We must date Kaṇishka either 100 years before 50 A. D. or after 100 A. D. (strictly speaking after 120 A. D.). Now the legends on his coin are in Greek. The use of Greek as a language of every-day life however ceased in the country to the East of the Euphrates partly before and partly soon after the close of the first Christian century. Hence Kaṇishka cannot be placed in the second century, but must belong to a period prior to the Christian times."

Now before me lie a pair of foreign coins: a nickel coin from Switzerland of 1900 and a Penny of 1897. The inscription on the former reads: *Confœderatio Helveticæ*. On the Penny stands *Victoria, Dei, Græ. Britt. Regina. Fid. Def. Ind. Imp.* I pity the historian of the fourth millennium who will draw from the coins the conclusion that about the year 1900 Latin was the language of daily life in the mountains of Switzerland and in the British Isles.

INDIAN INSCRIPTIONS AND THE KĀVYA.

BY G. BUHLER.

[Translated by Prof. V. S. Ghate, M.A., Poona.]

(Continued from p. 32.)

II. Vatsabhaṭṭi's Prabasti.

Vatsabhaṭṭi's composition consists of 44 verses, not to mention the two 'blessings' or *maṅgala*s in prose form at the beginning and at the end. The whole can be divided into sections, as follows:—

1. The *maṅgala* addressed to the Sun in verses 1-3 of which the 1st and the 3rd belong to the type of what is technically called *śloka* or *śloka* (blessings), while the 2nd verse falls under the category of *namaskṛiti* or *namaskṛita* (salutation).

²⁰ Fleet, *Jour. R. As. Soc.* 1903, p. 334, 1907, p. 1049; Franke, *Beiträge aus Chinesischen Quellen zur Kenntnis der Türkenvölker*, No. p. 93 ff.

²¹ *Young Fao*, S. II, Vol. VIII, p. 191, note 1.

²² *Zur Frage nach der Ära des Kaṇishka*, N. G. G. W. Phil. Hist. KL. 1911, pp. 427 ff.

²³ *Young Fao*, S. II, Vol. V., p. 489.

²⁴ *Beiträge* p. 73.

2. A poetic description of the guild of the silk-weavers of Daśapura-Mandasor, verses 4-22, in which, descriptions of their early fatherland Lāṭa or Gujārāt, and of their later home Daśapura, are interwoven.
3. A poetic picture of the suzerain Kumāragupta, verse 23.
4. The same of his vassals Viśvavarman and Bandhavarman, the rulers of Daśapura, verses 24-28.
5. A short description of the temple built by the weavers, verses 29-30.
6. The mention of the date of its construction with a poetic description of the winter season, when the temple was consecrated, verses 31-35.
7. A postscript narrating a restoration of the edifice demolished in parts, with a mention of the date of this event and a description of the season when it took place, verses 36-42.
8. A wish that the temple may last for ever, verse 43.
9. The name of the poet, verse 44.

If one compares these contents of the composition in question with the sample I have presented in *Wiener Zeitschrift für die Kunde des Morgenlandes*, Vol. II. pp. 86 and ff, it will be seen without doubt that this composition belongs to that class of *prajastis* (encomiums or panegyrics), of which the recent epigraphical researches have brought to light such a large number. The composition itself provides us with a clear indication that the poet also wished to have his work called by that name. For verse 44 says—"By the order of the guild and owing to their devotion, was built, this temple of the Sun; and the above was composed, with great troubles, by Vatsabhaṭṭi."

'The above' (*pāra*) is an expression which occurs frequently in later inscriptions of this type and which must be supplemented by the word *prajasti* as Mr. Fleet also remarks in the note to this verse. The fact that the actual title of the composition is not mentioned, but is only indicated, proves that in Vatsabhaṭṭi's time there were many such *prajastis* and that it was a familiar custom in the 5th century, to glorify the erection of temples and other edifices, by means of such occasional compositions.

Another interesting point in the foregoing verse is Vatsabhaṭṭi's assurance that he composed his work *prayatnena* 'with a great effort.' By this he means to say, no doubt, that he utilized with care the best samples and strove to observe very carefully the rules of poetica and metre. This careful study and this effort to do justice to the pretensions of the art of court poetry are to be marked in every verse. The very eagerness with which the author takes advantage of every little circumstance to bring in poetic details and descriptions, shows that he wished to do his best to make his composition resemble a *mahākāvya*. The science of rhetorics prescribes that a *mahākāvya* should contain descriptions of cities, oceans, mountains, seasons and so on. Thus Vatsabhaṭṭi is not dissuaded from devoting one verse (4) even to the early home of his patrons, the Lāṭa country, casually mentioned as it is. The city of Daśapura, of course receives more space and is glorified in nine verses (6-14). The descriptions of the two seasons, of winter in verses 31-33 and of the spring in verses 40-41, also find a place, as, to give the date completely, the month must be mentioned, and this naturally serves as an occasion for an excursus on the season in which the month falls. The examination of the metres used by Vatsabhaṭṭi and of his style would likewise show what great troubles he had taken, though, of course, the product is only of a mediocre type.

Next to proceed to the versification, there is a frequent change of the metres, which are sometimes very artificial. We have the following metres used—1. *Anuṣṭubh* 34-37, 44; 2. *Āryā* 4, 13, 21, 33, 38, 39, 41, 42; 3. *Indravajrā* 17, 26; 4. *Upajitī* 10, 12, 128; 5. *Upendravajrā* 7-9, 24; 6. *Drutavilambitā* 15; 7. *Mandākrāntā* 29; 8. *Mālinī* 19, 43; 9. *Vāṇīśā*

23; 10. *Vasantatilakā* 3, 5, 6, 11, 14, 18, 20, 22, 23, 27, 30-32, 40; 11. *Sārāṅghavikrīḍita* 1-2; 12. *Harīṇī* 16. Of these *Vasantatilakā* is the most frequently used, i. e. in as many as fourteen verses. The frequent change of metre finds, without doubt, its explanation in nothing but the writer's desire to show his skill in the art, as otherwise the *praisē* itself never demands it. There are many compositions of this class, in which only a single metre is used, or one principal metre and a second only in the concluding verses or verse. The best *mahākāvya*s present exactly similar phenomena. Sometimes we find that the whole of a *kāvya* comparatively short in extent, or a section of a long *kāvya* presents only one metre; sometimes there is one general metre with a different metre used at the close only; in other cases, again we see a large number of different metres used. One thing that is striking in Vatsabhaṭṭi's versification is the frequent use of the weak pause which occurs in ten *Vasantatilakā* verses, in two *Upeṇḍraśaṣṭī*s and in one *Āryā* (verse 33). In the last case, it stands at the end of a half-verse, where it is never found used by good poets, as far as I know. Vatsabhaṭṭi has thus made himself guilty of an awkwardness. Other cases wherein he commits offences against the rules of grammar or of rhetorics will be mentioned later on. As regards the form of the composition, it is to be further mentioned that often two or more verses form a *yugalakā*, a *viśāṅgā* or a *kulakā*. *Yugalakā*s or *yugmā*s are instanced in verses 21-22, *viśāṅgā*s, in verses 23-25, 26-28, 4-6, *kulakā*s in verses 6-14, 31-35, 36-41. This peculiarity also is very frequently met with in all *mahākāvya*s.

Vatsabhaṭṭi's diction shows many marks which characterise, according to Daṇḍin, the poets of the eastern school. First of all he makes use of long compounds, which cover a *pāda* or more than a *pāda* or even the whole of a half-verse. Instances of the last type occur in verses 4, 6, 8, 14, 32, 41, while those of the first and second type are much more frequent. The whole of the verse 33 consists of one single compound. If one compares Daṇḍin's illustration of the style of the Gāuḍas, (*Kāvyaḍḍarī* I. 82.) with our verses 32-33, the resemblance would be unmistakable. Secondly, the writer, in his attempt to bring the sound of the words into harmony with the sense, shows in one and the same verse a mixture of soft and hard sounding syllables, as is allowed only by poets of eastern India. Verse 26 runs thus:—

तस्मात्सन्तोऽथैवमप्यपन्नो बन्धुमियो बन्धुरिव प्रमानम् ।
बन्धुमिहर्ता नृपबन्धुवर्मा द्विदृष्टवत्तत्तत्पदैकवक्षः ॥

'His son is king Bandhuvārman, endowed with firmness and statesmanship, dear to the brothers, a brother, as it were, to his people, removing the sufferings of the relations, the only man skilful in destroying the proud hosts of enemies.'

Here, there is a change of *rāsa* or the poetic sentiment. The first three *pādas* describe Bandhuvārman's wisdom and goodness, the last his terribleness in war with enemies. Corresponding to this, the words in the first three quarters of the verse consist of syllables which are soft or light to be pronounced, in consideration of the necessity of the alliteration of the name Bandhuvārman. The fourth *pāda*, on the other hand, where the *raudra rāsa* prevails, contains only hard sounding syllables and agrees quite well with Daṇḍin's typical illustration, *kāvyaḍḍarī* I. 72 :

‘नन्दोऽथ सविहः पक्षः सविधानां सन्नासिनि’.

While explaining *Samatā* or evenness of form required for the *Vaidarbhī rīti*, Daṇḍin mentions (*Kāvya* I. 47-49a) the different types of letters which a verse can have and illustrates the same with examples. As the last example, he gives a half verse (49b) in which every *pāda* has a different combination of letters corresponding to the change of sentiment, and Daṇḍin farther adds in verse 50, that this sort of change or unevenness was in vogue only amongst the Easterns.

Of *Satdhānukāras* or figures of words, Vatsabhaṭṭi uses only the *Anuprāsa*, or alliteration. The letter-alliteration or *Varāṇanuprāsa* occurs in every verse. The *Padānuprāsa* or the repetition of the same word in different senses is found more seldom. The verse above (26) is an instance, where the word *bandha* is repeated thrice in honour of the king Bandhunarman. It is to be noticed that Kālidāsa in his brief accounts of the Raghu kings Nabhas, Puṇḍarika, Kaśemadbanvan, Ahinagu and others, plays on their names exactly in a similar manner. (*Raghuvamśa*, XVIII., 5, 7, 8, 13 and so on)²⁵. In *prajastis*, this sort of play on names is met with occasionally and one should specially compare the above-mentioned Lākṣhā-Maṇḍala *prajastī*, wherein almost everything is provided with a play on his name. A second instance of the *Padānuprāsa* occurs in the beginning of the first verse in *siddhaiḥ siddhyarthibhiḥ*, a third, in verse 2 in *kinnara-nareḥ*, a fourth, in verse 18, where the first *pāda* ends with *vāhid* and the second *pāda* begins with the same syllable, a fifth in verse 25 in *andhāndhah*, and a sixth in verse 37 in *atyuddram udāroyd*.

Of the *Arthānukāras* or figures of sense, the author frequently uses only the most familiar ones, viz. *Upamā*, *Utprekṣā*, and *Rūpaka* or the identification of two similar things. In the phrase *siddhaiḥ siddhyarthibhiḥ*, already mentioned above, a *Virodhānukāra* or Oxymoron appears to be attempted, and a *Dhvani* (see below) is contained in verse 9. It would be little interesting to enumerate severally the *Upamās*, *Utprekṣās* and *Rūpakas* which the composition presents. Far more instructive would be the attempt to place the most important images and turns of expression side by side with similar ones in the *Kāryas* and thus to show that quite a number of expressions characteristic of the *kārya* style occurs in Vatsabhaṭṭi's *prajastī*.

Even the praise of the sun in the *maṅgala* contains several points of relationship with passages in classical poems which are devoted to the glorification of the same godhead. The first two strophes :

1 'May the light-giver (*Bhāskara*), the cause of the destruction and origin of the world, protect you; the God, whom the host of gods worship, for purpose of their own preservation, the Siddhas (the accomplished), because they strive for higher accomplishments, the *yogins* entirely given to meditation, and having their objects of desire under their control, because they long for liberation, and the sages rich in severe penance, powerful through their cursing as well as favouring, from deep devotion of the heart !'

2. 'An adoration to the Generator (*Savitṛi*), whom even the zealous Brāhmaṇa sages knowing the truth, do not fully²⁶ comprehend, who supports the three worlds with his far-reaching rays, whom Gandharvas, gods, Siddhas, Kinnaras and men, praise, as he rises, who fulfils the desires of his devotees !'

comprise briefly the ideas which are met with in the *Purāṇas*, in the writings of *Seuras*, which identify the Sun with the world-spirit, and even in still older works. Amongst the court-poets there is one Mayūra, in whose *Sūryasataka*, a prayer addressed to the Sun, we have almost every one of the ideas contained in the verses above, repeated and with much the same form of expression. As Vatsabhaṭṭi praises the Sun as being the generator and the destroyer of the world, so also Mayūra identifies him, in verse 99, with Brahman, Vishnu and Siva, the three gods who generate, preserve and destroy the Universe. As the *prajastī* speaks of the worship of the Sun and of the prayers offered to him at dawn, so also does the *Sūryasataka* frequently emphasise the idea that men and spiritual beings adore the Sun in the morning, only with this difference that the number of the divine and semi-divine beings that bring their adoration to the Sun, is much larger therein. In verse 13, the Sun's rays are praised by the seers amongst gods. According to verse 36, the lustre of the rising Sun is eulogized by the Gandharvas both in prose and verse, as also by

²⁵ The numbers of verses should be 6, 8, 9, 14 respectively according to the Nirpaya-Sāgara edition of *Raghuvamśa*.

²⁶ *Kṛśṇa* seems to have been taken by Bühler with *vidh*.—V. S. G.

Nārada and other beings of antiquity. According to verse 81, prayers are offered to the Sun in the morning, by the Siddhas, gods, Chāraṇas, Gandharvas, Nāgas, Yātudhānas, Sādhyas and princes amongst sages, by each in his own peculiar way. So also, the *Sūryasataka* often dwells on the thought that the Sun nourishes the gods and the world,—a thought already suggested by the Vedic name of the Sun-deity, viz., Pūshan—and that he makes them free from the bonds of transmigration (re-birth). As for this latter point, verse 9 says of the Sun's rays that they are 'the boats which carry men through the fearful ocean of existence, the source of great sufferings.' Further, the Sun's orb is described in verse 80, as 'the boat for the *yogins* across the ocean of existence', and in verse 73, as 'the door of the liberated.' So also the Sun is depicted with special fulness as the nourisher of men and gods and as the maintainer of the entire order of the world (verse 87). The same thought is more briefly expressed in verse 77, where the Sun's orb is named 'the life-principle of the world'. It may be further added that in the older *Varāhamihira* also we meet with the thoughts expressed in the beginning of our *praiśasti*. Thus in the first verse of the *Bṛīhat-saṁhitā*, the Sun is invoked as 'the generator of the world' and as 'the soul of the Universe', and in the first verse of the *Yoga-yūtra*, as 'the soul of embodied beings', and as 'the door of liberation'.

The third verse of the *maṅgala* :

3. 'May the illuminator (*Vīrasvat*) protect you, adorned with the beautiful ornaments of rays,—the god whose circle of rays shines forth daily, coming over from the high, expansive summit of the mountain of the East, and who is lovely like the cheek of an intoxicated woman !—' compares the reddish morning-sun with the reddened cheeks of a drunk *Nāyikā*. This comparison is quite characteristic of the court-poets, who are never tired of describing or alluding to the revels of their heroes with their wives in the harem. Even in the *kāvya* literature, this comparison is very often found used in connection with the rising as well as the setting Sun of the day. Thus, for instance, Bāṇa says in the beginning of a description of the evening: 'when the day went down, the day whose light became as soft as the cheek of a Mālava woman, reddened with the intoxication of wine, etc.' (*Harishchcharita* p. 212). Bāṇa's comparison is somewhat more nicely brought out than that of Vatsabhaṭṭi, owing to the use of the term 'Mālava woman' in place of the general expression *Aṅgādjanā*. The later poets make use of specific expressions, almost everywhere.

The following verses (4-6) describe the emigration of the silk-weavers from Lāṭa, the middle Gujārāt, to Daśapura, wherewith short descriptions of Lāṭa and of the environs of the city are interwoven. These do not rise above the level of mediocrity and have nothing remarkable. Of course, Daśapura, as we commonly see the cities described in the *kāvya*s, is called the beauty-mark (*tilaka*) on the forehead of the province, and this province also, which is named *dāśini*, the earth, is imagined to be a female. Accordingly the trees bending under the burden of flowers are spoken of as her ear-crests, and the thousands of mountains, as her ornaments. So also as befits the *kāvya* style, the mountains are spoken of as trickling with the juice flowing from the temples of wild elephants. The same remarks also apply to the next verses (7-9), in which further the lakes and gardens of Daśapura are spoken of. The description contains only the most usual expressions that are found used in *kāvya* in a similar connection. The lakes are full of blooming water-lilies, and lively with ducks and swans. The water near their banks is variegated with the flowers fallen from the trees. The swans therein are tawny-brown owing to the pollen fallen from the lotuses shaken by the fickle waves. The trees bending under the burden of their flowers, the humming of the bees bold with the intoxication of honey, and the incessant singing of the city-women walking for pleasure, make the groves lovely. It is to be noticed here that the description of the bees no doubt reminds us through *dāśini* of the bold

and intoxicated lovers of the beautiful women. The following verse, on the other hand, with which begins the description of the city is considerably more interesting :

10. 'Where the houses towering high, of purest wise, with flying flags and trim women, quite resemble the peaks of silver clouds variegated with flashes of lightning.'

Vatsabhaṭṭi has given himself great pains to bring out the best possible resemblance between the houses and the clouds and thus to excel the parallels frequently used in the *kāvyas*. This fact is specially proved by the double application of the word 'lightning-flash'. He is not merely content with describing the lightning-flash as the mistress of the cloud, dancing before the house for a moment, as Indian poets do very often, but he portrays the same as the gay flags waving over the houses. There can be little doubt that Vatsabhaṭṭi in this intended to surpass some poet known to him, and we can hardly help thinking that he had before him the description of the palaces in Alakā, which Kālidāsa gives in the beginning of the *Aparamegha* in *Meghadūta*. The verse runs thus :—

विद्युत्स्वन्तं ललितवनिताः सेन्द्रचार्यं सचित्राः
संगीताय प्रहृतमुरजाः स्निग्धगम्भीरवोचम् ।
अन्तस्तोयं यपिनयमुबस्तुङ्गमर्धलिङ्गायाः
वासावास्वां तुल्यितुमले यत्र तैस्तेविद्योदयैः ॥

'Where the palaces can match themselves with you (the cloud) by means of these and other particulars—their lovely, fair inhabitants resemble your lightnings, their gaily coloured portraits, your rainbow, their drums struck for concert, your lovely, deep thunder, their jewelled floors, the shimmering drops of water that you hide, their terraces towering up to the clouds, your height.'

In the view that Vatsabhaṭṭi tried to compete with Kālidāsa, we are still further confirmed, if we observe that in the next verse, he adds all the details met with in Kālidāsa, which are left out in verse 10. In that verse, he says :

11. 'And (where) other (houses) resemble the high summits of the Kailāsa, with long terraces and stone-seats, resounding with the noise of music, covered with gay pictures, and adorned with groves of waving plantain trees.'

The agreement of thought and imagery is thus quite complete. Only, Vatsabhaṭṭi says something more, and it is what we expect of an imitator and a rival. It goes without question that Vatsabhaṭṭi's verses are on a lower level than those of his model.

The next verse also, in which the description of the houses is further elaborated quite in an insipid manner, presents one point worthy of notice.

12. 'Where the houses adorned with rows of stories, resembling gods' palaces, of pure lustra like the rays of the full moon, raise themselves up, having torn open the earth.'

Here, the statement that 'the houses raised themselves up, breaking through the earth' is quite striking. If this expression means anything, it suggests a comparison of the houses with something to be found in the deep or the nether world, with something like the thousand, white-shining heads of Śeṣha. Such an image is however, defective, when there is already a comparison of the houses with the *vimānas*, the moving gods' palaces, soaring up high in the sky. The difficulty, I think, may be solved by supposing that Vatsabhaṭṭi has confounded, with little understanding, two comparisons used by the poets of his time. The comparison of houses with the *vimānas* of gods is not rarely found in epic works, but is still more frequently met with in the *kāvyas*. On the other hand, that of buildings with things in the nether world comes only as now and then in artificial poetry. Thus in Kālidāsa's *Raghuvamśa* XII. 70, we have :

स सेतुं बन्धवानासु ब्रह्मैर्लवणान्मसि ।
लोतलविचोन्नमं रोषं स्वभावं चार्द्रिणः ॥

'He (Rāma) had a bridge built by the monkeys on the salt ocean,—the bridge which was, as it were, the serpent Sesha, coming up out of the nether world, to serve as a bed for Vishnu.'

So also in Māgha's *Sūptilavadhā* III. 33, we have :—

नप्तेसमुद्रं ककुनः पितृजीर्णं कुर्वती काञ्चनवपुःशसा ।

सुरंगकान्तामुसहन्ववाहज्जालेव नित्या जलमुद्रतास ॥

'In the midst of the ocean, tinged with yellow-red, the regions, with the lustre of its golden ramparts, the city (Dvārakā) shone forth, like the flame of fire from the mouth of the mares, breaking up through the waters.'

It can be further seen that Vatsabhaṭṭi, in spite of the great labours he has taken with his poem, has committed several offences against good taste; and thus we would not be unjust to him, if we suppose that in this case, in his eagerness to bring in many figures of speech, he was tempted (laid astray) to confound in quite an unintelligible manner, two comparisons current in the literature of his time.

Not less interesting is the following verse of the *prajastī*:

13. 'Surrounded by two charming rivers of tremulous waves, the city resembles the body of the God of love, which (his wives) Priti and Rati with prominent breasts embrace in secrecy.'

The idea of the rivers looked upon as females is a very natural one. It is very frequently met with in the *kāvya*s. Thus Subandhu in *Vāsavadattā*, p. 102, l. 1-2, says of the Vindhya mountain: रेवया प्रियतनवेव प्रसरितवीचिहस्तवोपगुहः 'It is surrounded by the Revā (Narmadā) as by a beloved with the arms in the form of waves stretched forth.' Even a more exact parallel we have in a passage alike referring to the Vindhya, in the above-mentioned hymn of Agastya (*Bṛihat-saṃhitā* XII. 6):

रहसि नयनसक्तया रेवया कान्तवोपगुहं

'Whom the Revā embraces like an ardent beloved'. Even though it may not be certain that Vatsabhaṭṭi lived before Varāhamihira, one would be tempted to conjecture a close connection between his verse and that of the *Bṛihat-saṃhitā*. The real fact seems to be that all the three poets imitated some well-known model.

In the last verse in connection with the description of the city, we meet with a simile which is more rare:

14. 'With its Brāhmaṇas, who conspicuous with truthfulness, forgiveness, self-control, mental quietude, the observance of their vows, purity, firmness, the study of the *Veda*, pure conduct, modesty and understanding, possess no other treasures than knowledge and penance and yet are free from pride, shines forth this city like the sky with its multitudes of bright, glowing planets.' Nothing similar to this, in the old *kāvya* literature is known to me. On the other hand, in many works and in the *prajastis*, we often see conspicuous persons compared to the Moon or the Sun, and their family to the heavens. In a later work, the *Prabhāvakacharita* (the life of Hemachandra, p. 54) there is found the comparison of a poet with the planet Mercury (*Budha*.)

In the following description of the guild of silk-weavers, which possesses more of historical than of poetical worth, there are, on the one hand, several particular expressions, and, on the other hand, some general assertions, which are quite characteristic of the *kāvya* style. Thus in verse 15, we have the figurative use of the verb *jṛimbh* in the phrase *akṛākaṇṇaṁ pravijjimbhita-sauhriddhā* 'whose friendship augmented more and more everyday.' So also the compound *Śravaṇasubhaga* 'pleasing to the ear' (verse 16) should be compared with *netrasubhaga* 'pleasing to the eye' (verse 21), and *pratāpasubhaga* 'pleasing on account of warmth' (verse 31). *Subhaga* is particularly used by Kālidāsa very often in the sense of 'beautiful, lovely, pleasing' at the end of

compound words. Other poets also use the word similarly though more rarely. Further we must notice the second half of verse 17 :

अद्यापि चान्ते सनप्रगल्भाः कुर्वन्स्त्रीपानहितं प्रसङ्ग ॥

'And, even to-day, others courageous in war, effect by force the destruction of their enemies.' Here the wording which expresses the simple fact that some members of the weaver-class served as soldiers, is exactly as it is required in artificial poetry; and the words *samarapragalbhāḥ*. And *prasaṅga* of which latter, the position also is to be observed, are quite characteristic of artificial poetry.

With verse 23, begins the description of the princes of *Dāśapura* and their suzerain, wherein, at the very threshold we are face to face with quite a rush of images and turns of expression very frequently used by artificial poets.

23. 'While Kumāragupta ruled over the earth, which is circumscribed by the four oceans as by a moving girdle, whose high breasts the mountains Sumeru and Kailāsa are, and which smiles with the flowers in full bloom coming from the woods.

24. 'King Viśvavarman was the protector [of *Dāśapura*] who, equal to Sukra and Brihaspati in wisdom, the ornament of the kings on this earth, performed exploits in the battles, like Pārtha.'

The metaphor of the girdle and the breasts of the earth is absent from no Indian poet. The only thing to be noted in our passage is that Vatsabhaṭṭi selects for the comparison the most important mythical mountains. Probably, the Himavat and Vindhya which are otherwise frequently referred to in this connection appeared too trivial to him, not to mention his desire to surpass his predecessors. The third metaphor of the smile in the form of flowers is also not a rare one. So also the compounds *samudrānta* and *vanānta* are quite characteristic, in which the word *anta* has, really speaking, no meaning. The word *vanānta*, as the passages quoted in the great Petersburg Lexicon show, is very frequently used in the sense of 'forest-region, forest' in epics as well as in *kāvya* literature. *Samudrānta*, on the other hand, signifies only 'sea-shore' in other places. But this sense would not do in the present place. For the shores are really included in the earth; and it is only the rocking oceans that can suitably be represented as the swinging, moving girdle. Thus, on the analogy of *vanānta*, *samudrānta* appears to be used in the sense of 'the surface of the ocean'; and it is very probable that the compound is used only for the exigency of the metre.

Equally noteworthy is the figurative use of the word *vānta*, so favourite with the court-poets, which Daṇḍin treats of in *Kāvya*. I. 95-97 and sanctions as *atīśundarāṇa*. Of the comparisons in verse 24, that of the king with Pārtha or Arjuna is very familiar; so also is the comparison with Sukra and Brihaspati, the teachers and Purohitas of the Asuras and the gods. In the second verse referring to Viśvavarman (verse 25), the comparison of the king with the tree of Paradise, yielding all the desires, stands out prominently, a comparison which the needy poets, as is well known, apply very frequently to kings, in order to stimulate their generosity. Verse 26 with which begins the description of Bandhavarman has been discussed above. In the following verse, there occurs the stereotyped comparison with the God of love, which the poet has taken troubles to make even more emphatic by the use of several epithets :

27. 'Of a gracefulst form, he shines forth, though not wearing ornaments, by virtue of his beauty, as if he is a second god of love.'

Even the last verse contains a description of the terrible character of the king, very frequently recurring in the *kāvya* :

28. 'Even to-day, when the beautiful, long-eyed wives of his enemies, afflicted as they are by the severe pangs of widowhood, remember him, a painful, violent tremour tortures their full breasts.' With this may be compared, for instance, *Raghuravāṇa*, IV. 68, *Subhāshitavali*

st rather 'incarnation of love.'

Nos. 2482, 2535. Still more frequently are the pangs of the wives of the enemies, described, in the *prajastis*, with very various modes of expression.

As for the description of the temple, it is naturally (verse 30) 'resembling a mountain', 'white like the pure rays of the moon that has risen up', and 'quite comparable to a lovely jewel on the crest of the western city. After the restoration of the temple, it is said (verse 38) to be 'touching the sky, as it were, with its beautiful turrets,' and 'the receptacle of the spotless rays of the sun and the moon, at their rise', i. e., reflecting their rays. At last in verse 42, the poet assures us:

'As the heaven with the moon, and the bosom of Sārṅgī with the *Kaustubha* jewel shines in pure lustre²³ so does the whole of this stately city embellished with this best of temples. The similes and modes of expressions occurring in these verses also belong to the repertory of the artificial poets.

The last points in our inscription, which deserve special attention, are the descriptions of the two seasons. Of these, that of the winter in the *kuṭaka* formed by verses 31-35 runs thus:—

31. 'In the season, wherein the houses are full of beautiful women, which is pleasant on account of the feeble rays of the Sun, and the warmth of fire, when the fish conceal themselves deep under water, when the rays of the Moon, the top floors of houses, sandal ointment, palm-fans and pearl-necklaces afford no enjoyment, when the hoar-frost burns down the water-lilies,'

32. 'In the season, which is made lovely by the swarms of bees rejoiced by the juice of the opened flowers of the *rodhra*, the *priyaṅga* tree and the jasmine creeper, when the solitary branches of the *lavali* and of the *nagaṇa*, dance under the force of the cold wind full of frost,'

33. 'When the young men counteract the effects of frost and snow-fall, by fast embracing the massive thighs, the lovely breasts and the bulky hips of their beloveds,'

34. 'When four hundred and ninety-three years had passed, according to the reckoning of the Mālaras, in the season when one should derive pleasure from the high breasts of women,'

35. 'On the auspicious thirteenth day of the bright half of the month of *Sahasya* was this temple consecrated with the ceremony of auspicious benediction.'

Ritusamhāra V. 3, corresponds to a part of the first verse in this description:

न चन्दनं चन्द्रमयीचिरीतलं न हर्म्यं पृष्ठं सरविन्दुनिर्भलम् ।

न वायवः सान्द्रमुपारधीतला जनस्य चित्तं मेवन्ति सांपतम् ॥

'Neither the sandal-ointment cooling like the rays of the moon, nor the terrace pure bright like the autumnal moon, nor the winds cold with dense frost, please at present the minds of men.'

The idea of our verse 33 and of the close of verse 34 is expressed in *Ritusamhāra*, V. 9, thus:—

पयोधरेः कुङ्कुमरागपिञ्जरेः सुखोपसेज्यैर्नययौवनोन्मत्तिः ।

विलासिनीभिः परिपीडितोरसः स्वपन्ति शीतं परिभूय कामिनः ॥

Also verse No. 3925 in Sārṅgadharā's *Paddhati* bears a very great resemblance to the ideas contained in the verses before us:—

मालेयशैलशिखिपानिलसंमग्नः

श्रीकुङ्कुमकरन्दहतातिवृन्दः ।

कालोद्यतापतति कुङ्कुमपङ्कपिङ्ग-

श्रीकुङ्कुमम्बरनीकुचसङ्कुचोन्मत्तः ॥

'Now comes the season, which brings cold winds from the snow-mountains, when the swarms of bees are attracted by the juice of the jasmine in full bloom, when one should cling close to the high breasts of charming beloveds, breasts which are coloured yellow with saffron-ointments.'

Similar verses are found not seldom; and one may refer to *Sārṅg. Paddh.* Nos. 3924, 3937, and *Fikramāṇakacharita* XVI. 3 ff. 47-49, as parallels in point. In connection with verse 32, it must be added that 'the dancing of the branches or the creepers, owing to the wind' is a favourite

²³ विमलं should rather go with नयः—V. S. G.

idea in the *kāvyas*, an idea which is sometimes found very much elaborated. Thus, in *Kirātārjuna* IV, 14-17 we have an elaborate description of the creepers as dancing women of the woods; with this, we may also compare Kālidāsa, *Vikramorvaśya*, Act II. verse 4. The description of the spring, which comes in connection with the statement that the restoration of the temple was accomplished in the month of Tapasya or Phālguna (February-March), is shorter in length and presents fewer characteristic features:

40. 'In the season, when the arrows of the god whose body is purified by Hara, increase in their might, as they verily become one with the visible, fresh, blooming blossoms of the *ajōka*, the *ketaka*, the *sindurdāra*, the moving *atimukta* creeper and the *madayantikā*.'

41. 'In the season, when the solitary, large branches of the *nagaya* are resounding with the music of the swarms of bees delighted by the drinking of honey, when the lovely exuberant *rodhra* is thickly set with flowers newly bursting forth.'

The most noteworthy point here is the identification of the five kinds of flowers with the five arrows of the god of love. This idea is frequently met with in the *kāvyas* and still more prominent is the fact that the spring is described as making ready the weapons for Kāma.

Thus in *Kumdrasambhava* III, 27, we have:—

सद्यःप्रबलीद्भवचारुपत्रे नीति समर्पितं नवचूतवाने ।
निवेशयामास मधुहिरैकालाभाक्षराणीव मनोजवस्य ॥

'As the arrow of the fresh mango-blossom with tender sprouts serving as feathers, was made quite ready, Madhu set thereon the dark bees, which were, as it were, the letters of the name of the god of love.'

The same thought is more simply expressed in the verse quoted by Ānandavardhana in *Dhanyāloka* II. 28, (p. 106 of the text in the *Kāvyamālā*) and in the *Śāragadhara Paddhati*, No. 3789. The names of the flowers, however, do not wholly agree with those which, according to the familiar idea, are supposed to form the tips of the arrows of Kāma. Probably the author has intentionally chosen other names, because he misplaces the beginning of the spring in the closing part of the Śiśira or the cold season whose last month is the Tapasya or Phālguna.

What we have said so far is sufficient to establish the fact that Vatsabhaṭṭi was acquainted with the rules of Indian poetics and that he tried to satisfy the demands thereof, so that his *prajñati*, in form as well as in sense, strictly belongs to the domain of Sanskrit artificial compositions. From this we can further deduce, without hesitation, the conclusion that in his time, there existed a considerably large number of *kāvyas*, from whose study he cultivated himself, upon which he drew and with which he tried to compete now and then. The rightness of this supposition is confirmed by many circumstances. Thus, Vatsabhaṭṭi was not at all a man to whom we can give the credit of originality; nor can we name him as a poetic genius capable of giving new ideas. He shows the several weaknesses which characterise the poets of the second or third class, who compile their verses laboriously, after the model of the classical great poets. A number of points, which can illustrate this, have been already discussed above, and can be still further multiplied. Thus he uses expletives and particles not rarely, and never minds the fault of tautology, just in order to complete his verse. To the first category belongs *pradīyam* (verse 5), *saṁetya* (verses 5 and 15), *śatāt-tu* (verse 22), the abovementioned *anta* in *saṁudrānta* (verse 23), and *tirānta* (verse 7), so also the altogether meaningless prefixes *prati* and *abhi* in *pratibhānti* (verse 3) and *abhibhānti* (verse 19); so also we meet with quite striking tautologies; e. g. in *dhyānaikāgṛaya-raiḥ* (verse 1), where, however, the synonymous words *ekāgṛa* and *para* may perhaps be supposed to be put together in order to make the idea of the complete merging clearer and more emphatic; but in *tulyopamāndāni* (verse 10), it is very difficult even to find an appearance of excuse for the simultaneous use of the two synonymous words. Further, Vatsabhaṭṭi commits offences against

grammar, for purposes of metre. A slight mistake of the kind is the use of the *Ātmanepada* in *nyāsasanta* (verse 15), instead of *Parasmaipada*, though this may perhaps be excused owing to its similar use in epic poetry and on the ground of analogous mistakes met with in the *kāvya*s. Far worse, however, is the use of the masculine form *sprīṣann=iva* instead of the neuter *sprīṣad=iva* (verse 38), which has to agree with the substantive *griham* (verse 37). Mr. Fleet, of course, proposes to write *sprīṣatīva*, but it would not at all suit the metre. Besides, with this alteration, the whole construction would not only be changed but broken up into pieces, because then the locatives in verses 39-40, would be altogether hanging in the air. With the text as we have it, *sauśkṛitam* 'was repaired' (verse 37) is the verb in the principal sentence with which, all the following words, which are attributes of the time, can be quite rightly connected. If, however, we write *sprīṣatīva*, this itself, then, becomes the principal verb and then we must translate as follows:—

37. 'This temple of the Sun, which the generous guild caused to be built up again, in all its parts, very stately, in order to further their renown,'

38. 'That temple, which was exceedingly high, glowing white, the resting place of the pure rays of the Sun and the Moon at their rise, touched, as it were, the sky, with its charming turrets.'

Here the sentence is complete, and there is no verb with which the following words, 'after five hundred and twenty-nine years had passed, on the second day of the bright half of the lovely month of Tapasya' can be construed. Thus Vatsabhaṭṭi cannot be freed from the charge of having used a wrong gender, out of regard for the metre. We may suppose that he might have been conscious of the fault but that he might have consoled himself with the beautiful principle:

मायमपि मयं कुर्यादृत्तिमङ्गं विवर्जयेत् ।

according to which the correctness of the metrical form precedes every other consideration.

We can easily believe him as capable of such blunders, for, in the second half of verse 30,

यद्वाति पश्चिमपुरस्य निविडकान्तचुडामनिप्रतिसमं नयनानिरामम् ॥

we come across something worse, a fault in construction. The genitive *pācchimapurasya* goes with *Chāḍḍmaṇi*, and there is no substantive which is connected with *nivīṣṭa*. The grammatically correct form should have been *pācchimapure*, but that would not have suited the metre. To the category of poetical absurdities not specially alleged belong verses 7-8, where at first *sarāḍhi* 'the lakes' in general is used, then again *kvachit sarāḍhi* 'the lakes in some places' is used. Further in verses 10-12, the poet first speaks of *grihāṇi* 'the houses,' then again of *anyāṇi* 'other houses', and lastly again of *grihāṇi* 'the houses' in general.

Notwithstanding all these facts, it cannot be denied that Vatsabhaṭṭi was a versifier perhaps learned, but clumsy and little gifted. This conclusion appears in no way surprising, if we remember that he never lived at the court of his native place Daśapura, but was a man of limited means or of moderate circumstances. If Vatsabhaṭṭi would have been able to boast of a place at the court of Bandhuvārman or even of a mere connection with him, he would not have failed to let posterity know of the same or at least to praise his master as a patron of poetry. As nothing like this is done by him, we would not be wrong in supposing that he was a private man of learning, of the type found in all Indian cities, that he had specially studied the worldly lore and that he was not ashamed of making money by composing a piece of poetry occasionally, even when such a low class of people as the silk-weavers required his services.

Thus it is quite evident that the points of affinity with the classical literature, which are presented by a composition originating from such a man as Vatsabhaṭṭi are possessed of great significance. When we know that Vatsabhaṭṭi was not an original genius, but only a man who sought, with great effort in the sweat of his brow, to compile a medley of the classical modes of expression and exerted himself, though with little success, to play variations on the same or to improve upon them, then the supposition cannot be gainsaid that in the fifth century, there existed a *kāvya* literature quite similar to that known to us already. This conclusion is still further confirmed by the fact that all the above *prasaṅgis* in Mr. Fleet's volume which were composed between the year 400 and the year of Vatsabhaṭṭi's composition, present the same close

relations to the *kāvya*s known to us. We agree that a large number of these is no doubt of an insignificant character, and is written by private men of learning of the province, as, for instance, the *Daśapara prajastī*, but there still remains the stamp of the *kāvya* on them. One of the few pieces which show a higher talent, is Mr. Fleet's Number VI. Although the first two verses are very much distorted, still it can be unmistakably seen that it is written in a high style and by a real poet. The fragments of the first verse :—

यदन्तर्धोतिर्कोमलमुद्यमः ———

• • • • — व्यापि चन्द्रगुप्ताख्यमदुतम् ॥

remind us of Gaṇadhāra's words in Kālidāsa's *Mālarikāgnimitra* : महत्कृतं पुरुषाधिकारनिधं व्योतिः ॥ In the conclusion which is better preserved, the author gives his name and applies to himself the title of *Kavi*. It runs thus :—

तस्य राजाधिराजपेरचिन्त्योऽञ्जलकर्मणः ।

अन्वयप्राप्तसावित्री ध्यापुतः सान्धिविपहः ॥ ३ ॥

कौत्सः शास्त्र इति ख्यातो वीरसेनः कुलाख्यया ।

राज्यार्थन्यायलोक्तः कविः पाटलिपुत्रकः ॥ ४ ॥

कृत्स्नपूर्वाभ्यास्येन राजदेह सहायतः ।

भक्त्या भगवतः सम्मोहितामेतानकारयत् ॥ ५ ॥

3-4. 'Virasena, known by the family name of Kautsa Sāba, well-versed in grammar, politics, logic and the course of the world, a poet, living in Pāṭaliputra, who served as a hereditary minister to the sage-like king of kings, who performed deeds, inconceivable and bright,'

5. 'Came here (to Udayagiri) with the king himself, who intended to conquer the whole earth and caused this cave to be constructed, out of devotion for the divine Sambhu.'

The poet Virasena lived about the year 400 A. D.; for, as Mr. Fleet's No. III shows, Chandragupta II. had conquered the province of Mālvā in the middle of the Gupta year 82, i. e., 400/1 or 401/2 A. D. Thus the invasion, on which Virasena accompanied his master, can be undertaken not later than (but rather earlier) in the beginning of the year mentioned above. At this time, Virasena, as the verses above state, was the minister of foreign affairs. That a minister occupied himself with poetry leads us to conjecture that Chandragupta II.—Vikramāditya looked upon the Muses with favour or that poetry had at least the right to appear at Court.

(To be continued.)

TWO JAINA VERSIONS OF THE STORY OF SOLOMON'S JUDGMENT

(in Gujarātī and Jaiṇpūrī.)

BY L. P. TESSITORE, UDINE (ITALY).

THAT the story of the judgment of Solomon had been taken up by the Jainas and introduced into the vast body of their legendary literature has been well known ever since my fellow-countryman, F. L. Pullè, published his paper : " Un progenitore indiano del Bertoldo, "¹ in which two Sanskrit versions of it are exhibited. The existence of the story in the Jaina tradition may be traced as back as the composition of Malayagiri's commentary on the *Nandisutta* and is also found in Rājasekhara's *Antarakathāsaṃgraha*, a work which is partly based upon the former and the redaction of which appears to have taken place in the fourteenth century. It is as an exemplification of the *parokṣajñāna* that the story is quoted by Malayagiri in his commentary, in connection with other parables of a similar kind. Rājasekhara availed himself directly of such parables and incorporated them into his *Antarakathāsaṃgraha*, generally keeping close to Malayagiri's version and only indulging in some lengthier, or rather less hasty, descriptions and in minuter details. It is particularly Rājasekhara's version that Signor Pullè takes into account in the above mentioned paper, but in the notes thereto he quotes also the version by the commentator of the *Nandisutta*.

I think it sufficient to produce below the literal translation of both, since the reader may directly refer for the Sanskrit text to Signor Pullè's paper, page 10, III.

¹ See : *Studi editi dall' Università di Padova a commemorare il ottavo centenario dell' origine dell' Università di Bologna*, Padova 1888, Volume III.

(a) The version in the commentary
on the Nandisutta :

A certain merchant had two wives : the one had a son, the other was barren. The latter, however, also took good care of the child, for which reason the child was not able to distinguish: "This is my mother, not that." Now the merchant, together with his wives and his son, went to another country—where the *Īrthakara* Sumativāmin was to be born—and there just upon his arrival he died. And between the two wives a quarrel arose. The first one was saying: "Mine is this child, so it is I that am the mistress of the house." The second one was saying: "It is I." Then there was made a complaint at the royal court of justice, but nevertheless the question could not be disentangled. At last the thing came to the ears of the queen Maṅgalā, the mother in whose womb was staying the venerable *Īrthakara* Sumativāmin. The queen had the two co-wives summoned to her presence and then pronounced sentence: "After some days a son will be born from me. When he will have grown up and will be sitting at the feet of the present king Aśoka, he will decide your dispute. So till then eat and drink without any distinction." The barren woman accepted the sentence and the queen made out thereby: "This is not the mother of the child", and reproached her and made the other one the mistress of the house.

One will see at once that the two versions above nearly coincide in all particulars excepting as to the person that is made to decide the question and in the pretended sentence pronounced to penetrate the truth. Of the two discrepancies the former is of much the less importance, in that the story, being an example of keen discernment, was naturally fitted for being ascribed to any wise person, whose sagacity was to be illustrated. But the discrepancy concerning the form of the sentence in the two accounts is of greater value, and in this particular case the version given by the commentator of the *Nandisutta* is all the more interesting, from the point of view of comparative folklore, the more widely it deviates from the version in the Bible, which has been faithfully reproduced by Rājasekhara in his *Antarakathāsamgraha*. We shall return to this later on.

(b) The version in the *Antarakathā-*
samgraha :

A certain merchant had two wives : the one had a son, the other had not. The latter, however, also took good care of the child and the child was not able to distinguish: "This is my mother, this is not." Once on a time the merchant, together with his wives and his son, went to another country and just upon his arrival (there) he died. Then between those two quarrel arose. One was saying: "Mine is this child", and the other was saying the same. One was saying: "It is I that am the mistress of the house", and the other was saying: "It is I". Thus a quarrel having ensued between the two, and a complaint was made at the royal court of justice. The minister thereon gave an order to his men: "Here! First divide the whole property. After dividing it, cut the child into two parts with a saw and, having done that, give one part to the one and the other to the other." Thereupon the mother of the child, having heard the minister's sentence, equal to a thunderbolt surrounded by thousand flames suddenly falling on her head, with her heart all trembling as if it had been pierced by a crooked dart, with difficulty managed to speak: "Ah sire! Great minister! It is not mine: this child! The money is of no use to me! Let the child be the son of that woman and let her be the mistress of the house. As for myself, no matter if I drag out an indigent life in strange houses: though it be from a distance, yet I shall see that child living and by that much I shall attain the object of my life.² Whereas, without my son, even now the whole living world is dead to me." The other one uttered no word. Then the minister, having seen the distress of the former, said: "To this one pertains the child, not to that one", and made her the mistress of the house and reproached the other one.

² I read: नावता च कृत्यमात्मनः प्रपत्स्ये. Signor Pulli's reading: नावताचकृत्यमात्मनः प्रपत्स्ये has no meaning to me.

I have discovered two new later versions of the story in two MSS. belonging to the Indian collection in the *R. Biblioteca Nazionale Centrale* at Florence. The fact that both of them closely agree with Rājasekhara's account, as far as the form of the sentence is concerned, is a testimony to the greater popularity of that account in the Jaina tradition. Both the new versions are in *śāśāśā*. The first is derived from a MS. in the above mentioned Library, No. 539, 63 leaves, with 6 lines on each page. The MS. contains the Prakrit text of the *Nandīśutta* with an anonymous *śāśā* written in an old form of Gujarātī, the orthographical features of which appear to have been somewhat modernized by the latest copyist, though so imperfectly that it still retains many obsolete words, forms and spellings. Such are: स्त्रीई, राणीई, रीतई, instrumentals with suffix °ई (= °ई of the Apabhramṣa); एतले, corresponding to the Old Gujarātī एतलई and to the Apabhramṣa एत्तलई; मई, instrumental of the first personal pronoun like in the Old Gujarātī and in the Apabhramṣa; बिन्हे, for बे, probably connected with the Apabhramṣa बिहिण; पासई, locative form corresponding to the Apabhramṣa पासई, etc.

I give below the Gujarātī text, in which I have corrected without remark all the most obvious blunders, but retained all orthographical incongruities, like चइ beside ए, which are possibly the result of a period of transition, during which both forms of spelling were legitimate. For the same reason, I have nowhere substituted ख and छ for द and ङ, as in Old Gujarātī MSS. द is commonly written for ख and there is no particular sign for छ.

Text.

एक पुरुष-ने बे स्त्री । कालांतरे नाहनी स्त्रीई पुत्र
जन्मो । पिण वडी स्त्री पाले संभाले रमाडे पास सुचाडे
सर्व धेक करे । ते निज माता जाणइ । भेले जिन दिन
पुत्र बाधर छे । ते बालक बेहु पास जाइ । इन करती
बर्ष २ यथा एतले पिता मृत्यु पाव्यो । केतला-इक
दिन-ने चडे सोक-नो मन पिणजे जे ए बालक तो
मुझ ने हल्यो छे । ते माहे ए एव एधन ई हाथ
कई । ए सोक-ने रासी सम तुल्य करी राई । पछे
बडबाड मोडी उली । ई पुत्र-नो माता ई धन-नी धणि-
वाणी । पेनी कहे । पुत्र नई जायो घर-नी धणिवाणी ई ।
इम सोक्र-ने भगडो जागो । बडती २ बेहु राजा पास
गई । हे महाराजा ए पुत्र म्हारो धन पिण म्हारो । इम
बे स्त्री कहा लागी । पछि बिन्हे सोक-ने बिसारी बालक-
ने बिच-नो बिसारी बेह-ने कहे । बालक-ने बोलावो जे
पास भवस्वे ते एह-नी माता । बालक-ने बोलावो । बाल-
क बेहु पास जाइ बेह साहबो जोइ । बालक न जायो

Translation.

A man had two wives. In the course of time the younger wife gave birth to a son. The elder, however, used to feed him, to take care of him, to amuse him, to make him sleep at her side and do everything for him. He used to take her for his own mother. Anyhow, the child was growing up well. The child used to go near both of them. After two years had elapsed in such a way, the father died. Some days after, the mind of the co-wife grew perverted, (for she thought to herself :) "This child, indeed, is fondly attached to me. Therefore I will take to myself this child and this property, and I will put my rival to a condition equal to that of a slave". Then she started a quarrel (by affirming :) "It is I that am the mother of the child! It is I that am the owner of the property!" The other one protested: "It is I that gave birth to the child, so it is I that am the mistress of the house!". In such a way an altercation issued between the two co-wives. Wrangling all the way, both the women went to the king and there both began to protest: "O king! This child is mine and the money also is mine!" Then (the king) caused both the co-wives to sit down, with the child seated on the ground betwixt, and ordered them: "Call the child; to whom he will go near, that one is his mother." The child was called, but he went near both of them and looked both in the face. (It was clear that) the child could not distinguish

जे आ माता आ नही माता । राजा-नई पिता अपनी ।
 पछे राजा-नी राणी सगर्भा छे ते गर्भप्रभावई सुनि अपनी
 जे महाराजा ए न्याय ई करे । पछे राणीई पछी रीतई
 कह्युं पिछ न समझे । तिवारे कह्युं । एक पुत्र ल्यो एक
 धन ल्यो । तो पिछ न समझे । तिवारे राणी करे । पुत्र
 ने धन बेह अरधोअरध विहाची ल्यो । तिवारे ओर-
 नान ह[र]पी सगी माता दिलगीर याई । अरधो वे-
 हवे तिवारे ए राजाक मेरे तो एकी धन स्वा काम-नी । इन
 विचारी राणी-ने कह्युं । ई पोटी छे । ए पुत्र विहाची अर्ध
 करख्यो मा । ए पुत्र धन सोक-ने आपो । ई वलणुं करी
 पर नरीस । ए जीती ई हारी । पछी राणीई सोक-ने दूर
 करी सगी माता ने पुत्र धन पर सर्व सुख्यो ।

ए सुप्रतिनाथ-नी माता-नी बुद्धि कथा ॥

which was his mother and which was not. The king began to feel perplexed. Now, the head queen was pregnant; by the power of that (divine) embryo keen discernment arose (in her mind, so that she said:) "Great king! I will decide this question." Then the queen spoke in many ways, but the two parties could not come to an understanding. Then she said: "Let one take the child, the other the property", but even so they did not come to an understanding. Then the queen said: "Let both the child and the property be divided into two equal parts and do each take her own". The step mother felt thereat rejoiced, but the natural mother grew distressed. "If they divide everything into two halves, this child will die and of what use thereafter would the money be to me?" —thus reflecting to herself, she said to the queen: "It is I that am the liar. Do not divide this child into two parts. Give both the child and the money to my rival. I shall support myself by hard work. She has won, I have lost." Then the queen removed the false co-wife and delivered over to the natural mother the son, the money, the house and everything.

This is the story of the wisdom of Sumati-nātha's mother.

The other *bhāṣā* version is found in a MS. in the same Library, No. 760, 40 leaves, with 14 lines on each page, modern copy, incomplete. It is a Digambara MS. containing a collection of novels of various length and bears the title: *Punyāgarakathā*. It is written in a form of Central Eastern Rājasthānī¹, which may be easily identified with modern standard Jaipurī², though, perhaps, it is to be referred to a somewhat earlier stage of development, when the difference between Eastern Rājasthānī and Western Hindi was not so distinctly marked as in the present day. In fact it contains forms, which seem to point towards Braja and Kanauji, such as the forms: वा, वार for the oblique singular of the second demonstrative pronoun, which in modern Jaipurī is: व; the forms: जिहि, जिह, तिहि, तिह for the oblique singular of the relative and correlative pronouns, for which Jaipurī has: जी, जी; क्या for the neuter interrogative pronoun, which in Jaipurī ought to be: कोई; the forms with the—ह termination for the conjunctive participle, which in Jaipurī ends in—अर, etc. Quite noticeable are the forms: वै for the oblique feminine singular of the pronoun वो, which is probably derived from वहि and is to be compared with Mewāṭī: वै; कही for the oblique singular of the indefinite pronoun, which is also corresponding with Mewāṭī: कही यो for यो of the second person plural of the imperative, in which—ह is perhaps nothing more than an emphatic appendage. It will be further noticed that: व is very frequently substituted for; व; that the nominative singular of the first personal pronoun is: हूँ and the negatives are: नही and ने. The version of the judgment of Solomon is found on pages 25a-25b of the MS. In the Jaipurī text, which is following below, I have mainly limited myself to restricting the use of the nasalization, which mostly appears to be quite unnecessarily employed especially after: ऐ and आ, and to correcting a few wrong spellings.

¹ Here and elsewhere, for the classification of the Indian vernaculars, I adopt the terms introduced by Sir G. Grierson in his *Linguistic Survey of India*.

Text.

अयानंतर राजमहै नगर-मै समुद्रात्त वैस्व रहै । तिह-क
 भार्या वसुदत्ता वसुमित्रा सोव । तिह (*she*)-के छोटी
 वसुमित्रा-के पुत्र हुवै । सो सोन्यो-ही पुत्र-नै पिलावै । अर
 आपन पुषावै । केवाक दिन-नै सेठ मुवै । सो दोन्यो
 स्त्र्यो-मै विवाद हुवै । वा कहै महारो पुत्र । वा कहै
 महारो पुत्र । तब यो न्याव श्रेष्ठिक जो-कनै चावै । सो
 राजा-वतै यो न्याव हुवै नही । तब अनयकुमारजी भरोत
 प्रकार कार ठीक पाव्यो । सो कही बहै ठीक न पड्यो ।
 जब बालक-नै धरती उपरि नेहिया कही जो लुगी-सो
 दोय ठूक करि सोन्यो-नै आपो आपो वांटि द्यौह । तब
 बाह बालक-की माता वसुमित्रा छी बिहि कही । यो
 बालक ई-नै-ही द्यौह । हू देखि-ही जीर्जली । मारो क्या नै ।
 तब वै को अधिक स्नेह देखि वै-नै माता जाणि बालक
 वै-नै सोव्यो ॥

Translation.

Now, in the city of Rājagṛha, there was living the merchant Samudradatta. He had two wives: Vasudattā and Vasumitrā. To Vasumitrā, (who was) the younger of the two, a son was born. Both of them, however, used to amuse the child and to give him their breasts to suck. In the course of some days the merchant died and between the two women contention arose. The one was saying: "Mine is the child!" The other was saying: "Mine is the child!" Then this question was brought to Śreṇika, but by that king justice could not be done. Then Abhayakumāra tried in many ways to set it right, but it could not be set right in any way. (At last), when the child had been laid down on the ground, he said (to his men): "Cut with a knife (the child) into two parts and assign one half to each of the two (women)". Thereupon Vasumitrā, who was the mother of that child, said: "Give the child to her! I shall live (contenting myself) with simply looking (at him). There is nothing that belongs to me." Then, seeing that her love was the greater, (he) recognized her to be the (true) mother and made the child over to her.

The reader will have noticed that, whilst the form of the sentence is just the same in the two vernacular versions as well as in that in the *Antarakathāsangraha*, the person that is introduced to decide the question seems to differ in each of the three. In the *Antarakathāsangraha* it is the minister of an anonymous king, whilst in the Jaipuri version of the *Puṇyācārakathā* it is Abhayakumāra, the famous minister of king Śreṇika of Rājagṛha, and in the Gujarātī version it is the mother of the *tīrthakara* Samatīsvāmin, just as in the version by the commentator of the *Nandisutta* quoted by Signor Pullè. Now, as there is no reason to prevent us from identifying the anonymous king in Rājasekhara's account with Śreṇika and his clever minister with Abhayakumāra, there can be no doubt as to the Jaipuri version having the *Antarakathāsangraha* as its mediate or immediate source, and as to the Gujarātī version, on the other hand, being closely connected with the version in the Sanskrit commentary on the *Nandisutta*. The connection of the latter ones with each other is made furthermore evident by the fact that both of these two versions occur in commentaries on the very same work. Thus even the less important of the two main discrepancies between the two Sanskrit versions, to which attention had been drawn above, is turned to account for determining the affiliation of the two later versions of the story. There remains the discrepancy concerning the form of the sentence, which in the Sanskrit commentary on the *Nandisutta* is altogether different from the account given by all the other three versions alike. In other words, it is to be explained now that not unimportant discrepancy may be consistent with the Sanskrit commentary, which ought to be the source, not only of the Gujarātī version, but also of the version in the *Antarakathāsangraha*, the author of which openly declares that he has availed himself of Malayagiri's novels. In my opinion, there are two probable explanations of the questions, to wit: either the account in the Sanskrit commentary quoted by Signor Pullè does not represent the genuine version by Malayagiri, but only a variant of the latter; or, besides the version by Malayagiri, the Jaina tradition knew also another version of the Judgment of Solomon, which was in better agreement with that in the Bible, and which — it being more current than the former — was preferred by Rājasekhara for his *sangraha*.

THE OBSOLETE TIN CURRENCY AND MONEY OF THE FEDERATED MALAY STATES.

BY SIR R. C. TEMPLE, BART.

Continued from p. 132.

APPENDIX II.

Notes made on the spot by Mr. W. W. Skeat.

I East Coast.

1. *Kelantan*. 15 *pitis* or *kiping* = 1 *këndëri*: 60 *pitis* or 4 *këndëri* = 1 *kupang*¹⁹ 480 *pitis* = 8 *kupangs* = 1 dollar.

2. *Singora*. At Singora (April 21, 1899). I obtained three of the small cowries formerly used here as coins. Phya Sukum, the Siamese Coinmissioner for the Ligor group of States, told me that the number of them which went to one *pitis* (cash) varied a good deal according to locality,²⁰ but in this district he thinks it was 100.

3. *Singora and Patalung* (shores of the Inland Sea, East Coast). At Singora (April 16, 1899), the Siamese Governor of Patalung sent me by request 28 of the old cash formerly in use there. They were round coins of tin, or perhaps spelter, with a round hole in the centre, a little larger than the ordinary Singapore cent, and appeared to bear trilingual inscriptions—in Siamese, "Patalung" on one side; in Malay "Nēgōri Singgora" and a Chinese inscription on the other. Some of them were also struck with the letters E. B. L., which the Governor believed to be the *chop* (Hind. *chāḍp*, shop-stamp) of the Chinaman who struck them, and who was, he said, well known in Singapore. Four hundred of these cash, he said, went to the dollar, but they were never current beyond local limits.

4. *Patani, East Coast*. Chinese gaming counters with Chinese inscription on one side only, but otherwise resembling cash, were obtained from Jala, a province of Patani. No special local cash were obtainable either from Jala, Nawng Chik or Raman provinces, but were so from the provinces of Ligei, Teluban, Patani and Jering,²¹ which were perhaps rather more Malayan in custom at the time.

5. *Patani*. Siamese money was not in general use here, perhaps, but was understood in the ports of the Siamese-Malay States: *e.g.*, in Patani Town.

2 solat (lot) make	1 at
2 at	1 phai
4 phai	1 fūang
2 fūang	1 salūng
4 salūng	1 bat ²²
4 bat	1 tamlūng
20 tamlūng	1 chang (kati) ²³

6. *Patani*. Minted coinage. All Patani *pitis* (cash) were formerly coined in the precincts of the *is'ana* (palace) up to about two years ago (writing in 1899-1900). All the *pitis* were called in at the death of the late Raja, the new Raja issuing new coins, according to the usual custom.

¹⁹ Here the *kupang* = the *tali*.

²⁰ See *ante*, Vol. XXVI., pp. 290 ff. Cowries are nowadays grated and used medicinally.

²¹ Patani was divided into seven provinces. Cash were not obtainable in Kedah, West Coast, but were so in Kelantan and Tringgann, East Coast.

²² *kop* = 1 *li* *kal*.

²³ For an explanation of Siamese money, see *ante*, Vol. XXVII pp. 1 ff.

7. *Patani*. On my visiting the office of the Customs clerk, a Patani-born Hokien (Chinese), in company with Luang Phrom, the clerk produced two of the old cash-trees, which had been cast before the making of cash had been prohibited by the Siamese Government, and also some cash of Jering.

8. *Patani-Jering*. Present coinage.

20 pitis or kaping	make 1 kändəri
80 pitis or 4 kändəri	„ 1 kupang
640 pitis or 8 kupang ²⁴	„ 1 dollar

In the last reign the coinage was as follows :—

15 pitis or kaping	make 1 kändəri
60 pitis or 4 kändəri	„ 1 kupang
480 pitis or 8 kupang ²⁵	„ 1 dollar

The alteration was due to a change in the price of tin. The tin cash-trees may have from 10 to 12 or 15 coins on them.

9. *Patani-Jering*. I bought at Jering some gold *dinar*, there called *mes kupang* (gold *kupang*), which were brought round by an old Haji. He said that they had been dug up in a bottle at Bukit Kuwong about 18 to 20 years ago (writing is 1899) by a Siamese, and that as they were considered treasure trove, half of them had gone as usual to the Raja and half to the finder. Traditionally they are supposed to have been struck by Raja Merkah after his conversion to Islam. Another kind, struck on one side only, is said to have been minted by his wife after his decease. The traditional diameter of coins of this kind is alleged to be that of blossoms of the *tanjong* tree, but the two I bought were a little smaller. One of them had a rude figure of a bull on it, and the other that of a horse and both had Arabic inscriptions. One of them had had a small eyelet-hole added to the edge of the coin, which was intended (I was told) to enable it to be worn round a child's neck to benefit the child's eyes.

10. *Patani-Jering*. The new British dollar is called here *perak toka'* (*tongkat*, or the "staff silver" piece), on account of the trident borne by the figure of Britannia. The *perak naga* or "dragon-silver" piece (Chinese Canton dollar) is now charged here at a discount of from one to two kändəri (*naga kändəri*, *candareen*).

11. *Patani-Jering*. At Penarik, Singapore cents were by no means well or generally understood, but nevertheless they were accepted, though I had to get help in explaining what they were.

12. *Patani-Teluban*. Coinage.

12 pitis	make 1 kändəri
48 pitis or 4 kändəri	„ 1 kupang (<i>as-tali</i>) ²⁶
320 pitis ²⁶ or 8 kupang	„ 1 dollar

Formerly the coinage was as follows :—

10 pitis	make 1 kändəri
40 pitis or 4 kändəri	„ 1 kupang
320 pitis or 8 kupang	„ 1 dollar

The statement that 320 cash instead of 324 went to the dollar in Teluban may have been due to the old associations of the time when 10 pitis went to the kändəri. It cannot point merely to an appreciation of the pitis, as that would have evenly affected the scale throughout.

13. *Patani-Ligeh*. At Tanjong-mas we found that the pitis of Teluban were current there as well as the pitis of Ligeh. These last bore inscriptions :—(1) *chaping* (*kaping*) *Al*

²⁴ Here the *kupang* = the *tali*.

²⁵ But should be 334.

²⁶ Showing the *kupang* to equal the *tali*.

Shamsu wal Kamar fi Rabi'-al-awwal, 1313 [A. D. 1893]. (2) *Langkat (Ligeh) khalik min zalik menjadi dörripada ini negeri.*

The *pitis* of both districts were however of equal value, which perhaps made things easier. The scale of currency was as follows :—

10 <i>pitis</i>	make 1 <i>këndäri</i>
40 <i>pitis</i> or 4 <i>këndäri</i>	„ 1 <i>kupang</i>
320 <i>pitis</i> or 8 <i>kupang</i>	„ 1 <i>dollar</i>

14. *Patani-Ligeh.* The small currency at Tomoh consisted, I was told, of gold dust, and this is quite intelligible, as gold washing is the staple industry of the place. I asked the Chinese headman to give me 5 dollars' worth of this small change in gold; but his Chinese instincts were too strong for him, and I could afterwards only get 3 dollars for what he was pleased to call 5 dollars' worth of change.²⁷

15. *Patani-Ligeh.* Gold-dust is said to be used as small change both at Mombang and at Rekoh, though the people at the *pönghula's* house declared they had none of it.

16. *Patani:* descriptions of Patani cash.

(a) Teluban. Inscription in Arabic²⁸ :—*ataui tazani fi billah bisawaf. tubin* (i.e., Teluban) *sanat 1306* (A. D. 1891).

(b) Jambu (Jering) : Inscription in Arabic : *al kadir biladi saharni hazar il wanna.* *Yambu* (i. e., Jambu), *1312* (A. D. 1895).

(c) Patani.

(i) Inscription in Arabic : *almamshiri wan fi biladil. Patani* (i.e., Patani), *sanat 1309* (A. D. 1892).

(ii) Inscription in Malay :—*ini pitis bilanja didalam neghri Patani* : this cash is coin within the country of Patani. It is said that in Jala no *pitis* are coined.

(d) A Singora coin. Has a Malay inscription on one side and Chinese on the other.

17. *Kelantan.* Old and present Kelantan *pitis* (cash) are said to go 480 to the dollar. They bear inscriptions : (1) *chaping (këping) li amir saf'a mulkahu daulat Kelantan, 1305* (A. D. 1888) :—(2) *Thuribah fi Jamad-al-awwal.*

18. *Kelantan and Patani.* Cash-trees were obtained in both States.

19. *Patani-Ligeh* : description of cash.

(a) Inscription in Arabic :—*sultan-al-adhim daulat Ligeh Khalif.*

(b) Inscription in Malay :—*2 hari bulan Rabi'-al-awwal, 2nd day of the month of Rabi'-al-awwal ; sanat 1307* (A. D. 1890) : *asha ama wal rahman.*

20. *Coins obtained on the East Coast.*

(a) Three small cash with hole in centre, and same legend on both sides ; no mint mentioned, but probably Kelantan. Inscription : *Khalif* [atu'l-mu] *minin.*

(b) one Patani cash.

(c) one Kelantan cash.

(d) twenty-three large Trengganu cash, with legend : *sapuluh kepeng 10, ten cash-piece 10 kepeng*, on one side : *dkarab fi Targanu* (Trengganu) on the other.

(e) two *joko*, gambling counters passing current in Trengganu with Malay legend on one side : *ini Ban Sing-punya*, this is Ban Sing's ; and in Chinese on the other.

²⁷ That is he made 2 points in 5, or 40 per cent., by manipulating the currency. See ante, p. 17, for the West Coast mint method, and p. 26 for the Dutch E. I. Company's method in similar circumstances. It was his idea of legitimate trade profit.

²⁸ All Arabic readings can only be approximate on such coins.

- (d) one Siamese coin bent (*tikal*) used by gamblers as being easy to pick up.
 (e) one Penang coin with Malay legend:—*Pulau Pinang* on one side, and arms of the British East India Company on the other.
 (f) three old cash, much defaced: one with Trengganu clearly written (*t-r-ng-a-nu*): the other illegible.
 (g) four American half-dollars, which go by the name of *jampal*: the oldest 1810.
 (h) four Java coins (guilder, half-guilder, quarter-guilder, eighth-guilder). The two latter have Malay and Javanese inscriptions:—*sa-pärèmpat rupiya* (quarter rupee) and *sa-pärpuluh rupiya* (eighth-rupee) respectively.
21. *Pahang*. In a Malay house on the *Lebih*, I saw cash hung upon the strings of a *para* (hanging tray), which was suspended over the hearth, just as they are hung upon the strings of an *anchak* (tray for offerings to the spirits). Deer-hoofs were hung underneath the *para*, just as is the case with the hoofs of the goat, whenever one is sacrificed for exposure in an *anchak*. In the same way coins are fixed to the shrouds of the spirit-boat (*lanchang*). In fact it seems pretty generally understood by all the Malays in the Peninsula that the spirits will appreciate the value of cash. *Pahang* is part of the British protectorate. Kelantan, Patani, Trengganu and Kedah, including Setul, Perlis, Singora and Patalung are under Siamese administration.^{29a}

22. Patani:	<i>Jambu (Jering).</i>	Gold weights.
	2 saga kändöri ²⁹	= 1 saga bösar
	4 saga kändöri	= 1 kupang
	4 kupang	= 1 'mas (mace)
	16 'mas	= 1 tahl (tael) of 16 dollars
23. Patani:	<i>Raman-Ligeh.</i>	Gold weights. ²⁹
	4 lada	= 1 puchok
	4 puchok	= 1 padi (saga kändöri)
	4 kändöri	= 1 'mas
	5 kändöri	= 1 kupang
	8 kändöri	= 1 rial (Sp. dollar).
	15 rial	= 1 tahl
24. Patani:	<i>Raman-Ligeh.</i>	Silver weights. ²⁹
	2 puchok	= 1 padi
	3 padi	= 1½ cents
	6 padi	= 1 kändöri

II: West Coast.

25. Singapore and Malacca Currency.

4 duit (¼ cent.)	make	1 sen (cent.)
2½ sen	„	1 wang
10 wang	„	1 suku (quarter dollar)
4 suku	„	1 ringgit (dollar)

26. *Perak*. *Wang baharu*³¹ means the new (silver) piece valued at 2½ cents. According to Klinkert,³² the wang (*uwang*) was a small piece of money = 10 duit = *een dubbeltje* (a Dutch

^{29a} Trengganu, Kelantan, Kedah and Perlis have since been transferred to British territory.

²⁹ *Kändöri* seeds = candareen; *saga bösar* = great seed. *Saga* by itself means usually the *kändöri* or candareen, i.e., seed of the *admanihera pavonia*, which is double of the *adrus precatorius* seed. Here however *saga kändöri* is clearly the latter and *saga bösar* the former.

³⁰ It seems possible that in these cases the informant mixed up weights with relative and absolute value.

³¹ Maxwell, *Malay Manual*, p. 142.

³² *Nieuw-M-N. Woordenboek*,

silver coin worth two pence). It was also a gold-weight = $\frac{1}{2}$ 'mas (mace). Klinkert no doubt refers to the old *wang*.

27. *Perak*. Maxwell's *boya* is no doubt a vulgar corruption of *buaya* (*buwaya*), i.e., the "crocodile" coin, which is referred to by Klinkert, who says it was a tin coin in Selangor in the shape of a crocodile, and that the value was 20 *duit*s, as formerly issued.

28. *Perak*. The recess in the design in the *tampang* or "block"-coin is called *melumba*, which may be connected with *lombong*, a "paddock" in the workings of a local tin mine, so named from its sloping side.

29. *Perak and Selangor coinage*. In Penang, Kedah, etc., the *tampang* was called *kupang*.

The copper coinage now in use in the Federated Malay States is the cent (100 to the dollar) and half-cent of the Straits coinage. Till recent years, however, copper coins from nearly all the adjacent countries were admitted, but Government has some time since taken the matter in hand, and foreign copper coinage has been largely prohibited in the Federated States. A small copper Dutch coin called *wang* is still in use at 2½ cents.

The small silver coins of the Straits currency (British) now used in the Federated States are 5, 10, 20 and 50 cents. They are called *siling* or *s'killing* (Dutch, *skilling*), and were preceded by small silver pieces about the size of a Straits half-cent piece, but thinner. They had a design described as a shield and crown and were evidently Dutch or Javanese. They were sometimes collectively called *wang*, i.e., change, though this term more properly applied to the copper *wang*.

For the half-dollar (*jampal*), the United States coinage was sometimes employed.

The dollars in use were as follows:—

- (a) One of the oldest dollars, used in the Federated States, was the "pillar" dollar called by the Malays the "cannon" dollar, as they mistook the pillars on it for cannon. I have met with one or two specimens in Selangor.
- (b) The Mexican dollar with eagle and snake was largely used till quite recently, and was called the "bird" dollar (*ringgit burung*): the "snake" dollar (*ringgit ular*): and even the "butterfly" dollar (*ringgit rama-rama*).
- (c) The "scales" dollar (*ringgit nirača*).
- (d) Chinese and Japanese dollars were also in use.
- (e) Not long ago the Government has minted a British dollar at Singapore, which has been called the "Staff" dollar (*ringgit tongkat*) from the trident carried by Britannia.

30. *Perak-Selangor*. A *tali* was always 12½ cents. The expression *sa-perak* (one silver-piece) was also formerly used for 6 cents as money of account, though there may have once been such a coin.

31. *Penang and Province Wellesley*. Swettenham, *Vocabulary*, p. 129.

10 duit (cent)	make	1 kupang
12½ duit	„	1 tali
2 tali	„	1 suku (quarter)
4 suku	„	1 ringgit (dollar)

The *duit* (Dutch) is divided into halves and quarters: *salingah duit* and *suku duit*. Klinkert *Woordenboek*, says s. v. *tali*:—*sa-tali* = $\frac{1}{2}$ gulden; "*naar het hoord met 75 pitis, dat vroeger daarvoor gebruikt werd.*" Here the *pitis* = cash of the Chinese variety.

32. *Kedah: Ulu Kedah*. At Baling I found old Straits coins, copper cents of the East India Company when it administered Penang, still current.

33. *Setul: N. of Kedah*. I was told at Setul that a species of cash, *keping*, was formerly current, with a quarter of a Penang or Singapore cent: 4 *keping* (cash) = 1 Dutch *duit* (cent).

34. *Nagri Sembilan*. Names for currency, from report in *J. R. A. S.*, Straits Branch No. 18, pp. 356 f.

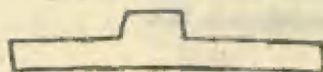
sa-wang	= 2 cents.
sa-perak	= 6 "
sa-kupang	= 12½ "
sa-suku	= 25 "
a'-omeh (sa-'mas)	= 50 "
sa-liku ³³	= 21 cents
dua-liku	= 22 "
tiga-liku	= 23 "
and so on to 29 cents	

sa-'ng baharu ³⁴	= 2½ cents
sa-tali = 5-'ng baharu ³⁵	= 12½ "
sa-liku-'ng baharu	= 52½ "
dua-liku-'ng baharu	= 55 "
duapuluh omeh	= 10 dollars
omeh duapuluh	= 7 "
duapuluh sa-rōpi	= 7 "
dua-bīlas sa-rōpi ³⁶	= 4 "

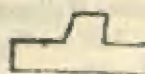
35. *Singapore and Peninsular*. Dollars recently in use.

Name.	Average weight in grs.	Parts pure silver.	Parts alloy.
Hongkong	416	900	100
Old Mexican	416½	898	102
New Mexican	417½	898	102
Japanese	416	900	100
American Trade	420	900	100
British	416	900	100

36. *Perlis, N. of Kedah*. A certain amount of tin is exported from Perlis: 60-70 *katf*=1 *jongkong* or slab. In Selangor and Perak, the slabs are called *kāping* or *jongkong*, and the smaller pieces *buku*. The shape of the slab was roughly that of the *tampang*, which was a clear imitation of it. This seems to be a strong link between the tin currency and the system of blocks or slabs in which the tin is actually cast.



kaping or jongkong



tampang

³³ *Lekor* (liku) is the coefficient of the numerals between 20 and 30; so satu-lekor (sa-liku) is 21 and so on.

³⁴ *Wang baharu*, new coin: used in Malacca for a small obsolete silver coin. The phrase still means 2½ cents in accounts.

³⁵ The original has 5-'ng baharu, which, as Mr. Blagden has pointed out, is a misprint for 5-'ng baharu.

³⁶ The last three statements are not clear. *Ome* duapuluh and duapuluh sa-rōpi are evidently equivalents; dua-bīlas sa-rōpi means clearly another kind of rōpi (piece). Apparently duapuluh sa-rōpi means "a piece of 20"=7 dollars, and dua-bīlas (bīlas, coefficient of numerals between 10 and 20) sa-rōpi, "a piece of 12"=4 dollars. If this reading be correct, the proportion is not quite right, as 7:4::12 produces 84:80. If, however, the two sides of the equation are intended to tally, *me* duapuluh would seem to mean "a gold piece of 20," whatever "20" refers to.


In Pahang the *tampang* have been turned into mere tokens (money) by hollowing them out. The shape is preserved and they fit each other like a series of bats.

According to Wilkinson, *Malay Dict.*, *jongkong* is applied to the hollowed-out tokens to distinguish them from the *tampang* or solid blocks, which were also called *raman*. It is however certainly applied in the first place to the slab of tin (*képing*), vide Klinkert. *Tampang* means a flattish square slab; the term is also applied to the "fort" or ramparts round a Raja's palace in the sense that these are four-square. It is also used sometimes even for the Pahang *jongkong*.

37. *Perak and Selangor.* Currency table for block tin.

5 cents	make	1 buaya (crocodile)
2 buaya	"	1 tampang (block)
5 tampang }	"	1 'mas or jampal ($\frac{1}{2}$ dollar)
2 bidor }		
10 tampang }	"	1 dollar
2 'mas }		

The weight of the *tampang* is said to have been about 1 *kati* in Selangor.

The entire currency is now obsolete and very hard to get. One of the minting places of the tin-block coins was Kerayong in the K'lang, Selangor. The *tampang* there minted were stamped with a mark called *tampok manggis*, or mangosteen rosette, which it was meant or thought to resemble .

The value of tin when these coins were current may have been not more than 12-15 dollars the *pikul*. It has lately gone up to 80-90 dollars, but for a good many years it varied from 20 to 40 dollars.

Some of the small varieties of the coins were carried on a string, but not all, and it is perhaps some 40 years or more since they were in vogue.

A *duit* in Selangor was formerly called a *pese*. Four *duit* or *pese*, went to a cent.

(To be continued.)

EPIGRAPHIC NOTES AND QUESTIONS

BY D. R. BHANDARKAR, M.A.: POONA.

Continued from Vol. XLII, p. 28.

XVI.—Sambodhi in Asoka's Rock Edict VIII.

A much discussed passage in this edict runs as follows, according to the Girnār text:—

*Atitadānā nūtarān rājānā vādhā-yādhānā kaydānā ca māyayā ādāni ca etārisāni abhiramādhāni
akudānā so Deśanāpiyo Piyaśasi rājā dātā-vas-ābhāsito sahto ayāya sambodhiā ten-asā dhamma-
yādhā.*

Now, what is the meaning of the expression, *ayāya sambodhiā*? According to Pandit Bhagwan'al Indrajī, it means, "reached true knowledge". M. Senart translates it by, "set out for perfect intelligence". Bühler renders it by "went forth in search after true knowledge". Mr. V. A. Smith's translation is "went forth on the road to wisdom". According to Prof. Rhys Davids, it means "set out for the *Sambodhi*—that is to say, he had set out, along the Aryan Eight-fold Path, towards the attainment (if not in his present life then in some future birth as a man) of the state of mind called *Arahatahip*". Dr. Fleet's interpretation is entirely different from any yet proposed. He regards *so Deśanāpiyo Piyaśasi rājā dātā-vas-ābhāsito* as a sentence in itself, and takes *sahto* to stand for *idānā* and to refer apparently to the Buddha. And he gives the following translation of the passage: "In times gone by, the kings went forth on pleasure-tours, on which there were hunting and other similar amusements: (so did)

this same king, Devānāmpiya Piyadasi, when he was ten-years-anointed: (but) 'the Tranquil One went to true knowledge': therefore (*there is now*) this touring for *dharma*". I submit my interpretation of the passage so that the scholars may take it for what it is worth. The knotty expression with which we are concerned is, *ayāya sambodhi*. The natural meaning of it is "went to *Sambodhi*" and not "set out for *sambodhi*" as contended by Messrs. Senart, Bühler and Rhys Davids. The words we have in the text are *ayāya* and not *patthāya*. Now the question arises: in what sense is the word *sambodhi* to be taken here? Is it to be understood in the sense of "perfect intelligence" as done by all scholars? As pointed out by M. Senart, it is impossible to credit Asoka with pretending to have attained to perfect intelligence. This meaning must, therefore, be rejected. It is worthy of note, that, while the Girnār recension has *ayāya* the Shāhbāzgarhī and Manabherā texts give *nikāmi* and the Kālsi *nikāmi*[*th*]. This root *nish-kram*, which always has a physical signification, precludes us from taking *sambodhi* in the above sense; in other words, *sambodhi* *nish-kram* cannot mean "attain to perfect intelligence". *Sambodhi* must, therefore, denote something with reference to which the physical action of going is possible. The conclusion is thus irresistible that the term here refers to the place where Buddha attained to true knowledge. If any instance is needed of the word *bodhi* or *sambodhi* having been employed in this sense, it is furnished by the following passage from the *Divyāvadāna*.

Yātrāy rājā = Ācokena jātāu bodhau dharmachakre parinirvāṇe ekaika-śata-sahasraṃ dattam tasya bodhau viśāhataḥ prasāda(o) jāta iha Bhagavat = ānuttarā samyak-sambodhi = abhi sambuddh = eti sa yātrā viśeṣa-yuktāni ratnāni tāni bodhiḥ prashayati, etc., etc.

I have no doubt that the word *bodhi* is in this passage employed in the sense of, "the word place where the Buddha attained to perfect intelligence". It may, perhaps, be argued that the word *bodhi* does not here denote the place where, but the date when, Buddha obtained perfect knowledge. But that this is not the sense here intended is shown by the words *bodhiḥ prashayati* where the word cannot possibly have that sense. The word *iha* occurring in the extract similarly points to a place and not to a date. It may, however, be argued that *bodhi* here means the *bodhi* tree. This sense also can suit the passage of the edict, though it does not seem to be intended in the passage of the *Divyāvadāna*. For if *jātā* denotes the place where Buddha was born, *bodhi* must necessarily denote the place where he acquired true knowledge.

I have said, above, that *bodhi* or *sambodhi*, in the sense of the Bo tree, can also fit the passage of our Rock Edict. That this word has this signification is clear from Childers' *Dictionary of the Pali Language*. A slightly grander term is *mahābodhi*, which is an almost exact equivalent of *Sambodhi*. It occurs in the name *Mahābodhi-saṅgha* of a well-known Pali work, published by the Pali Text Society. *Mahābodhi-gaṇa* is an expression which is frequently met with in this book; e. g., on p. 130, we have *taṃ khaṇaṃ yeva Bārdhāni-rājāhāniyā Brahma-datta-rājānaṃ ādāya mahābodhiṃ upagantā, etc., etc.*

Whichever sense of the word *bodhi* or *sambodhi* is taken, the purport of the edict in question is clear. It tells us that Asoka's religious-touring commenced with his visit to Bodhi. Of the four places connected with Buddha, that where he obtained enlightenment is considered as most important by the Buddhists. The *Divyāvadāna* also, as will be seen from the extract cited above, says that Asoka attached far more value to Bodhi than to anything else, and consequently gives a longer and much more glowing description of his visit there. It speaks of the religious benefactions made by him and also of the interviews he had with *stherikas*, exactly as the Rock Edict tells us.

XVII.—Was Devagupta another name of Chandragupta II?

On pp. 214-15 of this *Journal* for the last year, Prof. Pathak has given a summary of a Vākāṅga copper-plate grant which is in his possession. Therein Prabhāratī, mother of the

yuvardja Sri-Divākarasena, is spoken of as daughter of Chandragupta II, of the imperial Gupta dynasty. The same Prabhāvatī (-guptā) is mentioned in at least two published Vākātaka grants as daughter of Devagupta. And, as Prof. Pathak's grant, which was thoroughly examined by me, is an unquestionably genuine record, the conclusion is irresistible that Devagupta is another name of Chandragupta II. But if there is still any scepticism on this point, it is, I believe, set at rest by the Sāñchi inscription of Chandragupta II, dated G. E. 93. The following words which occur in it are important: *mahārdjādhirāja-īrt-Chandraguptaya Devardja iti priya-nāma*
. . . tasya sarva-guṇa-sampattaye, etc. The lacunae here are rather unfortunate, but if we make an attempt at grasping the true meaning of the passage in the light of what precedes and follows, I doubt not that it is intended to tell us that Devarāja was another name of Chandragupta II. Prinsep translated this passage so as to make Devarāja another name of this Gupta king. "This may be correct," says Dr. Fleet. But he prefers to supply the lacunae by reading *Devardja iti priya-nāma*=[*amātyo-bhava*]:[*y*]-[*s*]:[*tasya*], and take Devarāja as the name of his minister. *Priya-nāma* Dr. Fleet correctly renders by "of familiar name," but this phrase loses its sense if Devarāja is taken to be a name not of Chandragupta but of his minister. What is the force of saying that the minister's familiar name is Devarāja, when his other and generally known name is not given? On the other hand, if it is taken to refer to Chandragupta, the full significance of the passage is brought out. For the name Chandragupta is, as a matter of fact, first mentioned, and it is immediately followed by Devarāja. This first name is more widely known, but the second is more familiar. And there is also very great propriety in Āmrakārdḍava, the donor, giving this second name of the Gupta sovereign. For Āmrakārdḍava was not a Chief, but an officer of Chandragupta, as rightly said by Dr. Fleet. And it is but natural that he should mention over and above the usual and common, also the favourite, name of the sovereign by which he was familiarly known in his palace where Āmrakārdḍava must have more often come in contact with him than elsewhere. Again, Āmrakārdḍava is said to be *anujit-satpurusha-sadbhāva-vṛttin jagati prakhyāpayan*. This epithet becomes appropriate only if Devarāja is taken to refer to Chandragupta. For part of his gift is intended to produce perfection of all virtues in Devarāja. If this Devarāja is no other but a minister, the expression *anujit-satpurusha-sadbhāva-vṛtti* has no meaning. This epithet would, therefore, naturally lead us to suppose that Āmrakārdḍava made the grant for the benefit, not of the minister, but of the sovereign. There can thus be no doubt that the Sāñchi inscription gives Devarāja as another name of Chandragupta II only. And this corroborates the Vākātaka plates of Prof. Pathak.

XVIII.—Manandasor inscription of Naravarman.

A new inscription has recently been brought to light at Mandsaur or Mandasor, the chief town of the district of the same name in Scindia's Dominions of the Western Malwa Division of Central India. It is now lying in the possession of Lala Dayashankar, a local pleader, but was originally found near the Fort gate not far from the village of Toḍī.

The stone on which the inscription is engraved appears purposely to have been neatly cut out after line 9 for being used in some building. The object of the record is thus not clear, as it is lost with the missing portion of the inscription stone; but it seems to be something connected with the god Vāsudeva. This benefaction, whatever it was, was made by an individual named Satya, who was a son of Varṇavarddhī and grandson of Jaya. The record refers itself to the reign of Naravarman, son of Siṅghavarman and grandson of Jayavarman, and is dated the 5th of the bright half of Āśvaja (Āśvina) of the Mālava (or Vikrama) year 461 = A. D. 404. It is thus evident that this Naravarman is identical with the prince of that name who is mentioned as father of Viśvarman by the Gaṅgdhār inscription of V. E. 490.¹ And we know from another Mandasor inscription that

¹ Fleet's *Gupta Inscr.*, p. 74 ff.

Viśvavarman's son was Bandhavarman.³ We thus obtain the following line of the feudatory princes who ruled over Malwa from about the middle of the fourth to about the middle of the fifth century A.D.

- (1) Jayavarman
- |
- (2) Siṃghavarman, son of (1)
- |
- (3) Naravarman, son of (2)
V. E. 461 = A. D. 404.
- |
- (4) Viśvavarman, son of (3)
V. E. 480 = A. D. 423
- |
- (5) Bandhavarman, son of (4)
V. E. 493 = A. D. 436

Among the various epithets of Naravarman mentioned in our inscription occurs in l. 5 the epithet *Siṃgha-vikrānta-gāmini* (*Naravarman*). If I have understood this expression correctly, it shows that Naravarman was a feudatory of Chandragupta II. We know from Gupta coins⁴, that *Siṃgha-vikrama* was a title of Chandragupta II.; and we also know from a Sāñchi inscription that this Gupta sovereign was reigning till G. E. 93 = A. D. 411, i. e., for at least seven years after the date of our inscription. Nothing, therefore, precludes us from concluding that the expression *Siṃgha-vikrānta-gāmini* hints that Naravarman was a tributary prince of Chandragupta II. And this is in keeping with the fact that his son and grandson, viz., Viśvavarman and Bandhavarman were feudatories of Kumāragupta.

The verse which sets forth the year is very important, and I, therefore, quote it here.

Śri(r)-Mālava-gaṇa-dmndte prajaste Kṛita-sahjñite [I].

Eka-shashṭy-adhike prāpte sand-jata-chatusṭay[e] [II].

The two expressions that are worthy of consideration in this verse are *Mālava-gaṇa-dmndte*, and *Kṛita-sahjñite*. The first reminds us of similar expressions found elsewhere, viz., *Mālavāndm gaṇa-sthityā* and *Mālava-gaṇa-sthiti-vaidt* of the inscriptions dated V. E. 493 and 589 respectively and both discovered at Mandasor itself. But what is the meaning of the expression *Mālava-gaṇa-dmndte* which occurs in our inscription? In my opinion, it can have but one sense, viz., "handed down traditionally by the Mālava tribe." The root, *d-mnd*, primarily signifies "to hand down traditionally,"⁵ and, consequently, the word *gaṇa* can here only mean "a tribe," which again is one of its usual senses⁶. This, I think, is clear and indisputable, and the other similar phrases just referred to, must be so interpreted as to correspond to this. The late Prof. Kielhorn⁷ took these latter to mean "by, or according to, the reckoning of the Mālavas." But to understand *gaṇa* in the sense of *gaṇand*, as he undoubtedly does, is far-fetched. Besides the expression occurring in the new inscription clearly shows that the word *gaṇa* must in all these phrases be taken to signify "a tribe." The word *sthiti* of the expression *Mālava-gaṇa-sthiti* now remains to be explained, and it is obvious that it must bear a meaning which would correspond to *dmndta*. *Sthiti*, therefore, must mean some such thing as 'a settled rule or usage' which, doubtless, is one of its senses⁸. This also brings out clearly the meaning of the instrumental which is intended by *Mālavāndm gaṇa-sthityā* and *Mālava-gaṇa-sthiti-vaidt*, as was first pointed out by Prof. Kielhorn. These expressions must, therefore, mean, "in accordance with the (traditional) usage of the Mālava tribe."

³ *Ibid.*, p. 82.

⁴ The *Amarakośha* s. g. gives *sahjñā* (=traditional usage) as one of the meanings of *dmndya*.

⁵ One Bijaygaḍh inscription s. g. speaks of Yaudheya-gaṇa (*Gupta Inscriptions*, p. 252). *Gaṇa* is also found appended on coins not only to the name Yaudheya but also to Mālava (*Catalogue of the coins in the Indian Museum*, Vol. I. by V. A. Smith, pp. 173-4 and 182).

⁶ *Ante*, Vol. XIX, pp. 56-7.

⁷ *Vide* the St. Petersburg Lexicon sub voce and the references culled there from Sanskrit literature.

⁸ *Jour. R. As. Soc.* for 1889, p. 87-90; 1890, pp. 111-12.

Now, what can be the meaning of *Kṛita-saṁjñite*, which expression also is met with in our inscription? Obviously, the years 461, are here meant to be called *Kṛita*. But it may be asked, "Are there any inscriptions which contain instances of this word applied to years?" I answer in the affirmative, for there are at least two inscriptions which speak of *Kṛita* years. They are the Bijaygaḍh stone pillar inscription of Vishnvardhana and the Gaṅgdhār stone inscription of Viśvavarman referred to above. In the first, the date is mentioned in the words, *Kṛiteshu chaturshu varsha-śateshu = aśṭadviṁś(ā)śeshu 400 20 8*, etc.³ The second sets forth the date in the following verse: *Ydteshu chatuṣ(r)shu kri(kṛi)teshu śateshu sau[m]yeshu = śīṭa-sottara-padeshu=īha vatsa[reshu]*⁴. Dr. Fleet translates the word *kṛiteshu* by "fully complete," but admits that it involves a straining. Besides, even with this meaning, the word is made redundant by *ydteshu*, which is used along with it. But the sense of *kṛiteshu*, and consequently of the two passages in which it occurs, is rendered clear and intelligible, if we take it to be a name by which the years of what is now called the Vikrama era were known, as no doubt the phrase *Kṛita-saṁjñite* of our inscription tells us. But here a question arises: "Was *Kṛita* the name of an era?" It is difficult to answer the question definitely at the present stage of our research. But the manner in which the word *Kṛita* is employed leads us to surmise that it was at any rate not the name of a king or royal dynasty that was associated with these years. We have e. g., eras originated by Saka or Gupta kings. But we never hear of expressions such as *Sakeshu vatsareshu* or *Gupteshu vatsareshu*. The Bijaygaḍh and Gaṅgdhār inscriptions, on the other hand, as we have seen, speak of *Kṛiteshu varsheshu* or *vatsareshu*. It is for this reason that I am inclined to think that *Kṛita* was not the name of a king or dynasty that was given to these years. It is not safe just at present to make an assertion on this point, but it appears to me that what is now known as the Vikrama era was invented by the people or astronomers for the purpose of reckoning years and was consequently originally known as *Kṛita*, which means "made." If this supposition is correct, it is clear why *Kṛita* can be used in apposition to years as is no doubt intended in the passages cited above. I do not, however, believe that the Mālavas had anything to do with the actual foundation of the era. This is evident from the word *śmāṇṭa*, which never means "originated". The word can here signify only "handed down traditionally," and shows that the Mālavas were only in possession of a traditional usage regarding, i. e., of a mode of reckoning, the *Kṛita* years. We know that there are two systems of reckoning, which are peculiar to the Vikrama era, viz. the northern (*Chaitrārdī*) and the southern (*Kārtikārdī*). Whether the Mālavas were supposed in the fifth century A. D. to have handed down one of these or not is a question which we must await further discoveries to answer.

ON SOME NEW DATES OF PANDYA KINGS IN THE 13TH CENTURY A. D.

BY DIWAN BAHADUR L. D. SWAMIKANNU PILLAI, M. A., B. L. (MADRAS);

LL.B. (LOND.).

I.

IN December 1911, I obtained the permission of the Epigraphist to the Government of Madras, M.R.Ry. Rao Sahib H. Krishna Sastriar Avargal, to search the files of his transcripts of Pāṇḍya inscriptions for unverified dates to be used as illustrations to my *Indian Chronology* as well as to the method of verification of dates advocated in my little brochure, *Hints to Workers in South Indian Chronology*. The search resulted in the discovery of many unverified Pāṇḍya dates, equal in importance, and more than equal in number, to those upon which the late Prof. Kielhorn had been engaged from 1901 up to the time of his death in 1908, and which had been published by him from time to time in the *Epigraphia Indica*. I had reason to believe that a considerable proportion of these unverified dates had also been submitted to Prof. Kielhorn, but that he had not succeeded in discovering a clue to them. From a note in German by Prof. Kielhorn, which I found in one of the transcripts in the Epigraphist's office, it was apparent that, in order to be able to deal more effectively with Pāṇḍya dates, which no doubt present features of unusual difficulty (as pointed out in my *Hints to Workers in South Indian*

³ Fleet's Gupta Inscr., p. 253.

⁴ *IBJ.*, p. 75 II, 19-20.

Chronology), he had constructed a rough ephemeris for the years A. D. 1000—1300. From his description of the ephemeris, however, I gather that it could not have contained more than the first five or six columns of Table X of my *Indian Chronology*, if it contained so much; that is, he must have used, as data for all the *tithis* and *nakshatras* of a particular year, certain constants derived from the positions of the sun and the moon at the commencement of the year. I mention these details, because for the very same purpose of dealing effectively with Pāṇḍya dates, I have also constructed an ephemeris or daily *Trayāṅga* for the years A. D. 850-1000 and again from A. D. 1200 to 1500, which I intend to continue backwards as well as forwards; but my ephemeris gives, in addition to constants for every year and every new moon, which I have already furnished in print in Table X of my *Indian Chronology*, the actual ending moment of the *tithi* and *nakshatra* for every day in the period dealt with. It is possible to discover from this ephemeris, after a few trials and without any calculation whatever, the day corresponding to any combination of *tithi*, *nakshatra* and *vāra*. The accuracy of the results presented to Epigraphists in this article, as well as the ease with which I have been able to obtain positive results where Prof. Kielhorn and other investigators merely reported negative results, are due to the fact that I obtained them, as a rule, direct from my ephemeris, instead of having to work them out every time from my *Indian Chronology*.

For the sake of ready reference, I give below a list of all the Pāṇḍya rulers of the 13th and first quarter of the 14th century, whose initial years have been ascertained either by Prof. Kielhorn or by me, distinguishing by asterisks my own contributions to the list. Where I have been able to reduce to narrower limits the commencement of a reign given by Prof. Kielhorn, this fact is also indicated by an asterisk. Similarly, the fact that I have proved Kielhorn's Virā Pāṇḍya (the only prince of that name disclosed by his investigations) to have been a *Māravarman* is also indicated by an asterisk. To Kielhorn's eight Pāṇḍyas of the 13th century, I have added a dozen new names, so that the obscurity in which the history of the Pāṇḍyas of the 13th century has been hitherto involved, and which finds frequent expression in the annual reports of the Madras Epigraphist, has to some extent been removed. It remains for me, however, to acknowledge gratefully the liberal hints I have received from Mr. Rao Sahib H. Krishna Sastriar, in the matter of determining the broad

¹ *Annual Report*, 1911-12, p. 71. "No. 322 of 1911 which is dated in the 10th year of Jat. S. Pāṇḍya and quotes the 15th of Perunjingadeva may refer to the time of Jat. S. Pāṇḍya I (1251 to at least 1261), or to J. S. Pāṇḍya II (1276 to at least 1290). The latter is more probable, as J. S. Pāṇḍya I is always distinguished by the epithet who took all countries." I shall show below that the king referred to is J. S. P. I.

Annual Report, 1911-12, p. 72. "Inscriptions of this Jat. Virā Pāṇḍya, copied in previous years, do not give any clue as to the period when he flourished." I shall show, by means of four inscriptions copied so early as 1294, and one in each of the years 1906, 1907 and 1908, that this Jat. Virā Pāṇḍya came to the throne in A. D. 1254 and was no other than the person well known to Madras epigraphy as the conqueror of "Nam, Kongu and Chola."

Annual Report, 1910-11, p. 79. "Mār. Virā Pāṇḍya is another unknown king to whose 10th year belongs No. 377 of 1910." Again *Annual Report*, 1909-10, p. 99. "Mār. Tribh. Virā Pāṇḍya and Jat. Tribh. Virā Pāṇḍya, mentioned in Nos. 307 and 494 of 1909, could not be identified with any of the kings in Kielhorn's list." I shall show, by means of inscriptions, copied in 1905 and 1909, that the only Virā Pāṇḍya whose dates were investigated by Kielhorn was a *Māravarman*; I shall also show that there were at least three Jat. Virā Pāṇḍyas in the 13th century.

Annual Report, 1910-11, p. 79. "We do not know who Mār. Sundara Pāṇḍya was in whose 12th year.....the *kaikkīlar*....". In Nos. 342, 343 and 344 of 1911 (three dated inscriptions of the 15th year of Mār. Sund. Pāṇḍya) the *kaikkīlar* figure again, this time as donors of gifts. I have identified these dates as belonging to a reign which commenced in A. D. 1294.

Annual Report, 1909-10, p. 97. "Jat. Tribh. Sundara Pāṇḍya whose identity with any of the known kings of that name could not be definitely affirmed..... One of these inscriptions (418 of 1909) refers to an earlier grant by Kopperunjingadeva and helps us to identify this Sund. Pāṇḍya with Jat. S. P. II." I shall show, by means of 9 inscriptions copied in 1909 (including No. 418 of 1909), and three in earlier years, that this Jat. S. Pāṇḍya could not be either J. S. P. I or II, but a different person whose reign began in A. D. 1270-71.

Annual Report, 1908-09, p. 82. "Other kings of the name of Sundara Pāṇḍya who could not be identified by their characteristic epithets are Konar. Jat. Tribh. S. P. (Nos. 69 and 72 of 1908); Jat. S. P. (214, 217, 395, 411, 414 and 594 of 1908)..... Tribh. S. P. (130 of 1908 and 14 of 1909); Virā Pāṇḍya is represented by 13 inscriptions, in nine of which (119, 120, 122, 123, 124, 290, 401..... and 598 of 1908 and 59 of 1909) he is called Jat. Tribh. Virā Pāṇḍya." I shall show below that the eight inscriptions whose numbers are italicized in this quotation and for which details of day and month are available, can be referred definitely to certain known Pāṇḍya sovereigns, viz. Jat. S. P. II (411), Mār. S. P. II (130), Jat. V. P. II (134), Jat. V. P. III (119, 120, 122 and 401 of 1908), and Jat. S. P. IV (69 of 1908).

limits of the period to which each inscription relates. Without such hints, pure chronology would be very often at sea in such investigations. The annual reports of the Madras Epigraphist give only the Saka or the cyclic years of inscriptions, but not the details of month and day, where these are available. I have suggested to the Epigraphist that these details might be given in future³ in the Annual Report in all cases in which they are available, and also, where the only possible clue to the discovery of the year is the mention of a concurrent set of *tithi*, *vāra* and *nakṣatra* with or without solar month, that a brief indication of the period to which the characters and other epigraphical evidence might seem to point should be furnished in the Annual Report. Such an indication as "circa 13th cent." or "12th or 13th cent." or "later than 14th cent." is in the latter class of cases indispensable for chronological investigation. All details of *tithi*, *nakṣatra* and *vāra*, invaluable as they are for epigraphic research, are at present omitted from the epigraphist's annual reports, in order possibly to economize space, but no scientific record, however brief, can be complete without such details as may serve eventually to fix the date. The inscriptions containing such details are unfortunately not many. Moreover, if the tabular arrangement at present adopted in the appendices to the Madras Epigraphist's annual reports were replaced by the narrative form which I have adopted in Part IV of this article, there would not only be no waste of space, but considerable economy would result, and the Epigraphist would be able to include in the appendices everything he wished to quote from the contents of a given inscription, instead of having to divide his notes between the "remarks" column of an appendix and the text of his report. If the procedure I suggest were adopted, all the inscriptions found in a particular temple or other building would still stand together, as they do now, but they could be provided with a conspicuous heading, describing the temple or structure by its name, village, taluk and district. The tabular form seems to have been adopted more than 20 years ago when there were much fewer inscriptions and much less information to be recorded under each than is at present the case. It is now rather a hindrance than a help to the full treatment of an important or interesting inscription.

II.

List of Pāṇḍya rulers of the 13th century.

* An asterisk distinguishes additions made by the present writer to the list of Pāṇḍya kings published by Prof. Kielhorn at pp. 226-228 of Vol. IX of *Epigraphia Indica*.

Name of ruler.	Limits of commencement of reign.
* Jaṭavarman Vira Pāṇḍya I ³	18 Aug. 1189—15 Ap. 1190
Jaṭavarman Kulasekhara I	30 Mar.—29 Nov. 1190
Māravarman Sundara Pāṇḍya I	29 Mar.—4 Sep. 1216
* Jaṭavarman Kulasekhara II	*25 June—19 July 1216
Māravarman Sundara Pāṇḍya II	16 June—30 Sep. 1237
	15 June 1238—18 Jan. 1239
Jaṭavarman Sundara Pāṇḍya I	*3 July—1 Dec. 1238
Māravarman (*) Vira Pāṇḍya	10th—38 Ap. 1251
* Jaṭavarman Vira Pāṇḍya II... ..	11 Nov. 1252—13 July 1253
* Māravarman Srivallabha	15 May—19 June 1254
Māravarman Kulasekhara I	4—10 Sep. 1257
	2—27 June 1268
* Jaṭavarman Sundara Pāṇḍya (II)	*12—27 June 1268
	2 Nov. 1270—5 Jan. 1271
* Jaṭavarman Sundara Pāṇḍya II	13 Sep. 1275—15 May 1276
	*24 June 1276

³ I am glad to find that in the annual report for 1912-13 these details are for the first time given in full—L. D.S.

⁴ I have assigned numbers to the Pāṇḍyas of the 13th cent. merely for convenience of reference in this article. I do not recommend the employment of such numbers generally when dealing with the Pāṇḍyas: for it is certain that there were earlier Pāṇḍyas bearing the same names, though we do not now know their exact dates. It would be better to refer to each Pāṇḍya by the year of his accession.

* Called Jaṭ. Sundara Pāṇḍya II in Professor Kielhorn's list.

• Māravarman Vikrama Pāṇḍya	...	...	12 Jan.—29 Aug. 1283
• Jaṭavarman Vikrama Pāṇḍya	...	...	circa 1280
• Jaṭavarman Srivallabha	...	...	6 Ap.—12 Nov. 1291
• Māravarman Sundara Pāṇḍya III	...	...	20 Feb.—6 Mar. 1294
• Jaṭavarman Vira Pāṇḍya III	...	...	23 June—24 July 1296
• Jaṭavarman Sundara Pāṇḍya ² (IV)	...	...	29 Aug. 1302—5 July 1303
• Māravarman Kulāśekhara II...	...	...	6th—29 Mar. 1314
• Jaṭavarman Parākrama Pāṇḍya	...	...	15 Ap.—10 Aug. 1315
• Jaṭavarman Sundara Pāṇḍya V	...	...	10—25 Ap. 1318

III.

The following is a *tentative* arrangement of most of the above Pāṇḍya rulers, which will make it clear,

(1) that five Pāṇḍyas ruled at the same time, a fact established by tradition as well as by the statements of contemporary historians;

(2) that two Māravarman and two Jaṭavarman were co-regents with a fifth Pāṇḍya who might be either a Māravarman or a Jaṭavarman;

(3) that as a rule not more than one or two years elapsed between the death of a Māravarman or Jaṭavarman and the accession of the next Māravarman or Jaṭavarman. The interval of 4 years between the death of Māravarman Kulāśekhara I and the accession of Kulāśekhara II is accounted for by the Muhammadan invasion (*circa* A. D. 1310—*vide* Report on Madras Epigraphy for 1908-09, p. 82). Again there is a gap of ten years in col. (5) which one would expect to have been filled up by a Jaṭavarman. For the present I am only able to fill it up with Jaṭavarman Vikrama Pāṇḍya to whom I have assigned above the conjectural date *circa* 1280; but I admit this is not satisfactory;

(4) that, in what I have numbered as the first line of Pāṇḍyas of the 13th century, a Māravarman was regularly succeeded by a Jaṭavarman and *vice versa*, each successor being presumably either appointed by the reigning sovereign during his life time or called to the throne after his death.

N.B.—The main purpose of this tabular arrangement is to show that, taking *almost* any year between A. D. 1250 and A. D. 1315, it is possible to prove from inscriptions that five Pāṇḍyas ruled simultaneously. The qualification "*almost*" would probably be unnecessary if we knew the exact *terminal* year of each reign.

The terminal year of each reign here assumed is merely the latest year occurring in inscriptions (Pudukkottai inscriptions have in one or two cases been used for this purpose by anticipation), whereas the actual year of death may have been a few years later than that here assumed. Also a more careful investigation of the relationship among the individuals reigning at the same time, as well as of the places where they had their palaces, may lead us to a better adjustment of the concurrent lines which, as presented here, make *absolutely* no pretence whatever to a genealogical arrangement.

(1)	(2)	(3)	(4)	(5)
Mār. Sund. Pāṇḍ. I (1216—1244)	Mār. Vira Pāṇḍya (1252—1267)	Jaṭ. Vira Pāṇḍya II (1254—1275)	Mār. Sund. Pāṇḍ. II (1268—1285)	Jaṭ. Kulāśekhara II (1267—1289)
Jaṭ. Sund. Pāṇḍ. I (1251—1280)	Mār. Kulāśek. I (1268—1310)	Jaṭ. Sund. Pāṇḍ. III (1276—1295)	Mār. Srivallabha (1267—1299)	Jaṭ. Vikrama Pāṇḍya <i>circa</i> 1280
Mār. Vikram. Pāṇḍ. (1283—1291)		Jaṭ. Vira Pāṇḍya III (1296—1323)	Mār. Sund. Pāṇḍya III (1294—1301)	Jaṭ. Sund. Pāṇḍya II (1270—1303)
Jaṭ. Srivallabha (1291—1315)	Mār. Kulāśek. II (1314—1344)			Jaṭ. Sund. Pāṇḍya IV (1302—1318)
				Jaṭ. Parākrama Pāṇḍ. (1315—)
				Jaṭ. Sund. Pāṇḍ V (1318—)

² This was presumably the Sundara Pāṇḍya who, according to the Muhammadan historians, murdered his father Māravarman Kulāśekhara I.

IV.

An analysis of 77 Pāṇḍya dates hitherto unverified.

[Between 1902 and 1908, Prof. Kielhorn verified 67 Pandya dates—*vide* list at pp. 226-228, *Ep. Ind.*, IX.]

Explanatory Note.—I believe I have the authority of the Madras Epigraphist for saying that he accepts the *conclusions* arrived at by me in the present analysis. I accept sole responsibility, however, for the *calculations* here presented and wish to add, by way of caution, that variations to the extent of .02 of a day may be found in my results. This is the necessary consequence of my ephemeris being calculated to two places of decimals: but wherever the variation was likely to affect the *śāra*, I have taken care to calculate the result to four places of decimals according to the full method indicated in my *Indian Chronology*.

I have in my possession about 90 Pāṇḍya dates sent to me by the Pudukkottai State which, so far as they are capable of verification, I hope to publish in a later article after getting them epigraphically examined.

In quoting dates, I have used certain abbreviations the meaning of which will be obvious; *s. g.*, *su.* for *śukla*, *ba.* for *bhāḍa*, etc. I have indicated *nakṣatras* by placing their names between inverted commas, so as to distinguish them from the names of solar and lunar months. When I say that a *tithi* or *Nakṣatra* ended at .25 of the day, I mean that it ended 15 *ghaṭikas* after mean sunrise. A key to this decimal system will be found in the *Eye-Table* appended to my book, *Indian Chronology* (1911).

Jaṭavarman Kulasekhara I.

(Reign began between 30th March and 29th November 1190.)

1908 (103). From the south wall of the *maṇḍapa* in front of the central shrine in the Tiruttaliśvara temple at Tirupputūr (Madura District). Records (gift of) some lands belonging to the temple of Kailāsamūḍaiya Nāyanār by the *śabhd* of Tirupputūr, in order to provide for offerings on a festival in the same temple. Mentions *saṁvatsaraśāstrīyam*.

Date.—Year opp. 2nd of Tribh. Kulasekhara; 5th day of Mithuna; Sunday = Sunday 30 May A. D. 1193, which was the 5th Mithuna.

* Jaṭavarman Vira Pāṇḍya.

(Reign began between 18th Aug. 1189 and 15th April 1190.)

1903 (144). From the north wall of the six-pillared *maṇḍapa* in front of the Central Shrine in the Maṅgalāśātha temple at Pirāṇmalai (Madura District). Gift of money for offerings.

Tirukkoṇḍuṅṅuru was situated in Tirumalaiṇādu. Mention is made of Aḷagāpuri alias Sellyanārāyaṇapuram in Kēraḷaśinga-Vaḷanādu.

Date.—3rd year of Jaṭ Vira Pāṇḍya (no epithet) Kanni; *su.* 7; Anurādhā.

On Monday, 17 August 1192, Anurādhā ended at .44 and *su.* 7 at .20; but as the solar day was only the 145th it was 10 days short of Kanni. [*Kanni*, error for *Simha*.]

1906 (352). From the north wall of the Akhilāṇḍēśvari Shrine in the Sikkānāthasvāmin temple at Kuḍumiyāmalai (Pudukkottai State). Damaged. Sale of temple land for the purpose of repairing temple.

Date.—13th year of Tribh. Vira Pāṇḍya; *Mesha*; *su.* . . . , Sunday; Utt. Phalguni = Sunday 15th April 1201, when *Mēsha su.* 11 ended at .84 and "Utt. Phalguni" commenced at .27; (possibly regnal year 13 should be 12).

Māravarman Sundara Pāṇḍya I.

Reign began between 29th March and 4th September 1216

* 25th June and 19th July 1216

1906 (362). From the south wall of the second *prākāra* in the Sikkānāthasvāmin temple at Kuḍumiyāmalai (Pudukkottai). Registers a public sale of land and its purchase by Udaiyār Gāḷḡeyarāyar, a native of Āṇṇūr in Chōḷa-Pāṇḍya-vaḷanādu.

Date.—3rd year of Māravarman Sundara Pāṇḍya I; Mārgaḷl; ba. 5; Sat.; “Maghā” = Saturday 8 December 1218. Mārgaḷl ba. 5 and “Maghā” commenced just before sunrise on, and were current throughout, Saturday, coming to an end at .07 and .10 respectively on Sunday.

1907 (133). From the north wall of the *maṇḍapa* in front of the Maṇḍukundēśvara temple at Koḍumbāḷūr (Madura District). Seems to record a gift of land. Mentions Kārāiyūr in Sōḷa Pāṇḍiya-vaḷaṇāḍu.

Date.—13th year (in Pudukottai copy, tho’ Mad. Ep. Rept. notes that regnal year is lost) of Māravarman Sundara Pāṇḍya I; Mithuna; su. 2 (2nd *tiyaḍi*); Sunday; “Pushya”. On Sunday 24 June 1229 Mithuna su. 2 and “Pushya” ended at .59 and .22. Read *titaḷi* for *tiyaḍi*.

* Jātavarman Kulasekhara II.

(Reign began between 16th June and 30th September 1237.)

1905 (62). From the fifth pillar in the second storey of the east *gōpura* of the Sundarēśvara temple at Madura. Gift of land.

Date.—2nd year of Jāt. Kulasekhara; Tula; ba. 6; Thursday; “Mṛigaśīra”. On Thursday, 30 Sep. 1238, Tula ba. 6 and Mṛigaśīra ended at .91 and .36 respectively.

1910 (135). From the fifth pillar of the *maṇḍapa* in front of the central shrine in the Mulaśhānēśvara temple at Tenkarai (Madura District). Gift of land by the assembly of Sōḷantaka-Chaturvēdimahāgalaṃ, to the servants of the yōgaśhāna of Kāravar-dāsar situated in the ninth hamlet of the village.

Date.—2nd year of Jātavarman *alias* Tribhuvanschakravarthiṇ Kulasekharadēva—Mithuna 20, su. 13; Wed.; “Anurāḍha”. On Wed. 15 June 1239 (= 20 Mithuna) su. 13 and “Anurāḍha” ended at .87 and .20 respectively.

1908 (135). From the west wall of the store-room in the Tiruttalēśvara temple at Tirupputūr (Madura District). Seems to record a gift of four water pots for the sacred bath by Aranimoḷududaiyar, wife of Dēvaragaṇḍan.

Date.—10th year opp. 13th of Tribh. Kulasekharadēva. 16th Māsha; day of “Anurāḍha”. On Thursday 10 Ap. 1259 (= 16 Māsha) “Anurāḍha” began at .46. It ended next day at .40.

Note.—It is curious that in the 23rd year of Jāt. Kulasekhara I (whose reign began in A.D. 1190) there is a date, Tuesday 9 Ap. 1213, which satisfies the present conditions, *viz.* 16 Māsha and “Anurāḍha”; but Madras Epigraphist thinks the characters of the inscription cannot be referred to beginning of 13th cent.

Māravarman Sundara Pāṇḍya II.

(Reign began between 15 June 1238 and 18 Jan. 1239.)

* 3 July and 1 December 1238.

1908 (130). From the north wall of the first *prākāra* of the Agastyeśvara shrine in the Tiruttalēśvara temple at Tirupputūr (Madura District). Sale of land for the maintenance of a flower garden which was founded by Ponparriyudaiyāṇ Viḷuppāḍarāyar of Pullūrkuḍi in Naduvir-kūrū in the district of Mijalai-kūrūram.

Date.—2nd year of Tribh. Sundara Pāṇḍya. Dhanu 11, su. 10, Wed; “Āśvini”. On Wed. 7 Decr. 1239 (= Dhanu 11), su. 10 and “Āśvini” ended at .72 and .89 respectively.

Note.—The result agrees with that of Prof. Jacobi, published, since this article was written, in *Ep. Ind.* Vol. XI, p. 135: but the learned author satisfied himself with stating that the king in question must have begun to reign in A.D. 1237-38. As a matter of fact, the king is identical with Māravarman Sundara Pāṇḍya II (Kielhorn’s C. *vide* *Ep. Ind.* vol. IX, p. 227), though the inscription itself does not style him a *Māravarman*; and if my other identifications of Madras and Pudukottai dates of this reign are correct, he must have come to the throne between 6 Oct. and 1 Decr. 1238, *i. e.* in A.D. 1238-39, not in A.D. 1237-38.

1895 (169). From the east wall of the *maṇḍapa* surrounding the shrine of the goddess in the Kailāśapati temple at Gaṅgaikondān (Tinnevely District).

Date.—2nd year opp. [8th] of Māravarman Sundara Pāṇḍya; ba. 6; Wed.; “Hasta” = Wed. 6 Jan. 1249, when ba. 6 and “Hasta” ended respectively at ·32 and ·37 of the day.

[Possibly 11th year, not 10th; the reading is conjectural.]

1902 (616). From the inner side of the north wall of the *maṇḍapa* in front of the Vṛiddhapuriśvara temple at Tiruppunavāsal (Tanjore District). Sale of land.

Date.—3rd year opp. 14th of Māravarman Sundara Pāṇḍya “who conquered every country”; Kaṭaka; su. 7; Monday; “Svāti” = Monday, 12 July 1255, when Kaṭaka su. 7 ended and “Svāti” began.

Jatāvarman Sundara Pāṇḍya I.

(Began to reign between 20th and 28th Apl. 1251.)

1906 (260). From the south wall of the central shrine in the ruined Siva temple on the hill at Narasamaṅgalam (N. Arcot). Begins *Samasta-jagad-ādihāra*, etc. Incomplete. Registers a public sale of the village of Naraśingamaṅgalam in Māvandār-nāḍu, a sub-division of Kāliyūr-kōṭṭam, a district of Jayaṅgaṇḍa-chōlamāṇḍalam.

Date.—7th year of Jat. Sundara Pāṇḍya; Vṛiśchika; ba. 3; Monday; “Mṛigaśīra” = Monday 6 Nov. 1256, when Vṛiśchika ba. 3 and “Mṛigaśīra” ended at ·97 and ·33 respectively.

[6th Regnal year, not 7th.]

1901 (218) From the east wall of the Maṇḍapa in front of the Tirumālīśvara temple a Māgaral (Chingleput District). Records that a private person opened out streets and colonised the environs of the Agastyēśvara temple.

Date.—7th year of Jatāvarman Sundara Pāṇḍya “who conquered every country.” Mēsha; ba. 1; Rohini. On Thursday 27 April, 1256, Rishabha su. 1 (not *Mēsha* ba. 1, which is a double error) and Rōhini ended at ·38 and ·98 of the day respectively.

[7th year, as before, *vide* No. 260 of 1906 *supra*, an error for 6th.]

1901 (275). From the north wall of the *maṇḍapa* in front of the central shrine in the Divyajñānēśvara temple at Kōvilāḍi. (Tanjore Dt.)

Date.—7th year of Jat. Sundara Pāṇḍya I., distinguished by the introduction *Samasta jagad*, (Tanjore Dt.) 8th tithi; Monday; “Pūrva Āshāḍha”. On Monday 17 Sept. 1257 Kanni su. 8 and “Pūrvaśhāḍha” ended at ·76 and ·82 respectively.

1911 (322). From the west wall of the central shrine in the Dhēnupuriśvara temple at Mādambūktam (Chingleput District), quotes the 15th year of Perunjiṅgadeva and records a gift of lamps, etc., in the temple of Sīrri Aṇḍayanāyanār.

Date.—10th year of Jatāvarman Sundara Pāṇḍya; Rishabha; Sukla 11; Sunday; “Svāti”. On Sunday 23 May 1260, Rishabha su. 12 and “Svāti” ended at ·71 and ·60 respectively of the day. According to Kielhorn (*Ep. Ind.*, IX, p. 222) Perunjiṅgadeva began to reign between February and July 1243.

[As Rishabha su. 11 cannot ordinarily concur with “Svāti,” su. 11 must be an error for “su. 12.”]

1909 (677). From the south wall of the Maṇḍapa in front of the central shrine in the temple of Neḍuṅgaṇāthasvāmin at Tiruneḍuṅgalam. (Tamil). Begins with the introduction *Samasta-jagad-ādihāra* of Jatāvarman Sundara Pāṇḍya. Gift of land by the people of Miśengili-nāḍu in Tenkarai Jayasinga Kulakāla-vaṇaṇḍu.

Date.—Jatāvarman Sund. Pāṇḍya (“*Samasta-jagad*”); 11th year; Makara (apparent error for *Mina*); su. 6; Wed; “Rohini” = Wed. 5 Mar. 1264 when tithi su. 6 and Nakshatra “Rohini” ended respectively at ·50 and ·53. Reg. year appearing in inscription as “pat [.....] nṛāvuda” should be read as “pat [imu] nṛāvuda” (13th), not as “pat [ino] nṛāvuda (= 11th).

The combination, su. 6 and “Rohini,” on Wednesday occurred only once (*i. e.*, on this date) during the 40 years A. D. 1251-1290, although ordinarily such a combination may be expected at intervals of 3, 7 or 10 years.

1903 (125) From the north wall of the central shrine in the Agastyēśvara temple at Tiruchunai (Madura District). Incomplete. Gift of land. A certain Vaidyādhirāja is mentioned.

Date.—14th year of Jaṭ. Sundara Paṇḍya "who took every country" [Mina]; su. 7; [Sunday]; "Punarvasu" = Wed. 25 March 1265.

[Mina and Sunday, wrongly conjectured for Mésa and Wednesday.]

Vira Paṇḍya (Kielhorn's "E").

(Reign began between 11 Nov. 1252 and 13 July 1253.)

1909 (395) From the south wall of the verandah round the central shrine in the Vyāghrapādēśvara temple at Siddhalingamaḍam (S. Arcot). Gift of land by purchase to the temple of Tiruppulippagava-Nāyanār at Siṛringūr, a brahmadēya in Kurukkai-kūṛram, a sub-division of Malāḍu in Rājarāja-vaṇaḍu.

Date.—15th year of Māraṇvarman Vira-Paṇḍya; Dhanus; ba. 8; Saturday; "Hasta" = 10th Decr. A.D. 1267.

From this inscription it is clear that Kielhorn's *Vira-Paṇḍya* was a *Māraṇvarman*.

* Jaṭavarman Vira Paṇḍya.

(Reign began between 15 May and 19 June 1254.)

1894 (142) From the outside of the north wall of the second *prākāra* in the Nallaiyappar temple at Tinnevely. Gift of a lamp.

Date.—4th year of Jaṭ. Vira-Paṇḍya (no epithet), Vaikāsi [22]; Tuesday; "Hasta" = Tues. 14th May A.D. 1258 (= 20 Rāhabha or Vaikāsi). Hasta ended at '57 of the day.

[The solar date, Vaikāsi 22, which I found entered conjecturally in the Madras Epigraphist's records, should be 20th.]

1894 (129) From the outside of the south wall of the second *prākāra* in the Nallaiyappar temple at Tinnevely. Gift of land.

Date.—[4th] year of Jaṭ. Vira-Paṇḍya Simha; ba. 9; Sunday; "Rōhiṇi" = Sunday, 5 Aug. 1257 when Simha ba. 9 and Rōhiṇi ended at '92 and '74 respectively.

1894 (136) From the outside of west wall of the second *prākāra* in the Nallaiyappar temple at Tinnevely. Gift of a lamp.

Date.—Year opp. 5th of Jaṭ. Vira-Paṇḍya (no epithet); Kanni 14; ba. 5; Friday; "Uttara Bhādrapada". On Friday 11 July 1259 (= 14 Kāṭaka, not 14 Kanni), ba. '5 and "Utt. Bhād." ended at '36 and '66 respectively.

[Kanni, error for Kāṭaka]

1894 (151) From the inside of the west wall of the third *prākāra* in the Nallaiyappar temple at Tinnevely. Gift of land.

Date.—7th year of Jaṭ. Vira-Paṇḍya; Kāttigai 16; "Satabbishaḥ" = Friday, 12 Nov. 1260 (= 16 Kāttigai) when Nak. "Satabbishaḥ" ended at '17 of the day.

1908 (134) From the west wall of the store-room in the Agastyēśvara shrine in the Tiruttalāvara temple at Tirupputūr (Madurā District). Incomplete. Refers to the shrine of Sūryadēva in the temple of Tiruttalāyaṇḍa-Nāyanār and to the Kannadiyan horsemen from a foreign country.

Date.—10th year of Jaṭ. Vira Paṇḍya; (no epithet; but Kannadiyan horsemen are referred to); 10th year; Mithuna 7; day of "Maghā". On Sunday, 1 June 1264 (= 7 Mithuna) "Maghā" ended at '44.

1906 (435) From the north, west and south walls of the central shrine in Vēdanārāyaṇa Perumāl temple at Murappunāḍu (Tinnevely District). Mentions Śrī-Pōsala-Vira-Sōmidēva-Chaturvēdimaṅgalam, a brahmadēya in Murappunāḍu and a *naṣṭa* in it. Refers to a sale made in the 11th year (of the king's reign).

Date.—14th year of Jaṭ. Vira-Paṇḍya "who took Ilam, Kongu, and Chōḷa, and performed the anointment of heroes at Perumbārreppuliūr." Karkāṭaka; su. 1; Sunday; "Pushya". On Sunday 4 July 1266, Karkāṭaka su. 1; and "Pushya" ended at '94 and '79 respectively.

1907 (402) From stones built into the base of the *Isvara* temple at Pernungarunai (Madura Dt): these are fragments.

Date.—14th year of Tribh. Vira Pandya "who took Ilam, Kongu, and Sôlamandalam". Mithuna; Ekadasi; Sunday; "Krittika." On Sunday 19 June 1267, Mithuna ba. 11 ended at .84 of the day, while "Krittika" began at .25 of the same day, ending at .29 next day.

1908 (128). From the Tiruttatisvara temple at Tirupputtur, (Madura District).

Date.—22nd year of Tribh-Jatavarman Vira Pandya 4th day (*tedi*) of Rishabha, su. 2, the day of "Rohini." On Monday 29th April 1275 which was 4th Rishabha, but fell in the 21st year of the present reign, su. 2 and "Rohini" ended, the former at .27 of the day and the latter about sunrise [22nd regnal year should be 21st]. Prof. Jacobi, in Pandya date No. 91 contributed by him to *Ep. Ind.* Vol. XI, p. 137, was unable to refer this date in all its details to Jatavarman Vira Pandya whose reign began according to him in or about Decr. 1295, but the present reign is a more natural place for the date.

* **Mâravarman Srivallabhadêva.**

(Reign began between 4 and 10 Sept. A. D. 1257.)

1900 (110) From the south wall of the central shrine of the Rishabhêsvara temple at Chennama, in South Arcot District. (Inscription built in.)

Date.—4th year opposite the 17th of Tribh. Srivallabhadêva.

Mithuna su. 4; Saturday, "Maghâ" = Saturday 25 June A.D. 1278, when Mithuna su. 4 and "Maghâ" ended at .76 and .48 of the day respectively.

1904 (539) From the east wall of the first *prâkâra* of the Tyâgarâjavâmin temple at Tiruvârûr, Tanjore District; seems to record a gift of land (inscription built in at the end).

Date.—Mâravarman Tribh. Srivallabhadêva's 35th year; Simha; su. 5; Wednesday; "Krittika."

The day intended was probably Wednesday, 3 Sept. A. D. 1292 when Kanni ba. 5 (not Simha su. 5) and "Krittika" ended at .25 and .59 of the day respectively. [*Simha* and *Sukla* are errors for *Kanni* and *bahula*.]

Note.—There is a Pudukôtâ inscription for the same regnal year, Kanni; *paurṇamī*; Monday; "Revati"; which corresponds to Monday, 10 Sept. 1291 when *paurṇamī* ended at .02 of the day while "Revati" ended at .39 on the following day.

Mâravarman Kulasekhara I.

(Reign began between 12th May and 27th June 1268.)

1902 (598) From the inner *gôpura* of the Prêmapuriâsvara temple at Anbil (Trichinopoly Dt.), left of entrance. Gift of land.

Date.—1 [1]th year of Mâr. Kulasekhara; Kanni; su. 2; Wed.; "Anurâdha": on Wed. 19 Oct. A. D. 1278, Tulâ (not Kanni) su. 2 and "Anurâdha" ended at .65 and .77 respectively. [*Kanni*, error for *Tulâ*, as Kanni su. 2 cannot join with "Anurâdha" except in very unusual circumstances.]

1910 (126) From the west wall of the first *prâkâra* in the Mûlasthânêsvara temple at Tenkarai, (Madura District). Incomplete. Mentions the Tirujñânaśambandan-tirumaḍam in the same temple.

Date.—14th year of Mâr. Kulasekhara "who was pleased to take all countries." Kanni, su. 7; Sunday; "Mula". On Sunday 21 Sept. 1281, Kanni su. 7 and "Mula" ended at .92 and .58 of the day.

1910 (123) From the west wall of the first *prâkâra* in the Mûlasthânêsvara temple at Tenkarai (Madura District)—Damaged and incomplete. Mentions Teg-Kallaganâḍu.

Date.—23rd year of Mâr. Tribh. Kulasekhara, "who took every country;" Makara; su. [7]; Monday; "Hasta". On Monday 23 June 1292 (25th year of Mâr. Kul. I), Mithuna (not Makara, which is an obvious error), su. 8 (not 7) and "Hasta" ended at .80 and .09 respectively. [Through the kindness of the Government Epigraphist I had an opportunity of examining the impression on which *Makara* and *Saptamī* are fairly clear. If the inscription really belongs to this reign, it must be pronounced full of mistakes.]

1910 (124) From the west wall of the first *prākāra* in the Mūlathānēśvara temple at Tenkarai, Madura District. Damaged. Quotes the 10th year of Sundara Pāṇḍyadēva and mentions the Alālasundaran-tirumaḍam in the same temple.

Date.—28th year of Mār. Kulāśēkhara "who was pleased to take all countries;" Vṛiśchika ba. 4; Sunday; "Pushya" = Sunday 27 Nov. 1295, when Vṛiśchika ba. 4 and "Pushya" ended respectively at '70 and '56 of the day.

1909 (734) From the south wall of the *maṇḍapa* in front of the central shrine in the Muktiśvara temple at Pūrattnkōyil (Trichinopoly District). Gift of a village to the temple of Tirumūlīśvaramuḍiyan-Nāyanār at Kaḍuvankuḍi by the inhabitants of Muḍiyakkūḍināḍu and Vaḍakkūḍināḍu which were sub-divisions of Uṛattūr-kūṛram in Kōṇāḍu *alias* Kaḍalaḍaiyād-Ilāṅgaikōṇḍa-Chōlavaḷanāḍu.

Date.—28th year of Māravarman Kulāśēkhara; Kanni (should be *Dhanus*); ba. 10; Friday; "Hasta". On Friday 2 Decr. 1295, Dhanus ba. 10 commenced, ending at '46 next day, while "Hasta" ended on Friday, 2 Decr. at '55.

1904 (506) From the north wall of the central shrine in the Agastyēśvara temple at Agattiyānpalli (Tanjore District). Gift of land in order to celebrate a festival in the temple for the recovery of the king from some illness.

Date.—31st year of Mār. Kulāśēkhara; Rishaba; *iukla* . . . Sunday, "Utt. Phalg." = Sunday 10 May 1299, when "Uttarā-Phalguni" ended at '89 of the day. The titbi was su. '9.

1906 (46) From the base of the verandah enclosing the central shrine in the temple of Amṛitaghṛtēśvara at Tirukkaḍaiyūr (Tanjore District). Gift of land for 40 lamps for the merit of Ulagaḍaiya-Perumāḷ. The country is said to have been in a state of confusion for a long time and the inhabitants to be suffering distress in other provinces.

Date.—34th year Mār. Kulāśēkhara; Kanni; su. 7; Sunday; "Mūla". On Sunday 10 Sept. 1301, Kanni; su. 7 and "Mūla" ended at '31 and '93 respectively.

1903 (288) From the north base of the central shrine in the Pārthasārathisvāmin temple at Triplicane (Madras). Mutilated in the middle. Records a sale of land.

Date.—[4] 9th year [may be read, says Epigraphist, also as 41st year]; Mēsha; su. 5; Wed. "Rōhiṇī". On Wednesday 27 March 1308, Mēsha su. 5 ended at '60 of the day, while "Rōhiṇī" had ended at '97 on Tuesday. Local time may have added about '02 to mean time, so as to bring Nakṣatra "Rōhiṇī" up to sunrise on 27 March. A. D. 1308 was the 41st year of this reign.

(To be continued.)

THE INDIAN INSCRIPTIONS AND THE ANTIQUITY OF INDIAN ARTIFICIAL POETRY.

BY G. BÜHLER.

[Translated by Prof. V. S. Ghate, M. A.; Poona.]

(Continued from p. 148.)

III. Harishēpa's panegyric of Samudragupta.

THE second one of the inscriptions which we are going to examine, Harishēpa's panegyric of Samudragupta, presents many points of close touch with the *Kāvya* literature preserved and proves in the clearest manner that court-poetry was a subject most assiduously cultivated in the fourth century of our era. Harishēpa's panegyric covered originally thirty lines and a half, and consisted of eight verses in the beginning, a long prose-passage and a concluding verse. All the three parts together form one single, gigantic sentence. Unfortunately, the four lines in the beginning containing two verses have been entirely lost and lines 4-16 have been distorted more or less, so that we have only one of the introductory verses, in a complete form. The subscription of the author in ll. 31-33 informs us that not only the metrical lines but the whole of the composition is to be regarded as *kāvya*. It is said there:—

"And may this *kāvya*, of the slave of the feet of this same lord,²⁹ whose intelligence was expanded by the favour of dwelling near (His Majesty), the minister of foreign affairs, and the

²⁹ I. e. of the king Samudragupta. Mr. Fleet's supposition that Chandragupta II. is meant is grammatically not allowable.

counsellor of the royal prince,³⁰ the great General Harisheṇa, the son of Khādyatapakita³¹ and of the great General Dhruvabhūti, lead to the welfare and happiness of all beings. The accomplishment of the same was, however, looked after³² by the great General Tilakabhaṭṭa who meditates with reverence on the feet of his lord.'

Thus, this little composition of Harisheṇa belongs to that class of mixed compositions which in poetics are frequently called by the name *chāmpū*, while the oldest works preserved for us, such as *Vāsanadattā*, *Kādambarī*, *Harshacharita* and *Dakṣamāracharita* are called by the name of *ākhyāyikā* or *kathā*, 'a narration, a romance.' It possesses a certain relationship with the descriptions of kings, which are found in the *ākhyāyikās*. Similar to these³³ last, the description, in the present case, consists of one sentence with many adjectival as well as appositional phrases and a number of relative sentences. As will be shown later on, there are many agreements in respect of details. But, besides, Harisheṇa's composition presents its peculiarity or special character in several respects. This comes out in the grouping of the elements and especially in the skill in bringing out a connection of the praise of Samudragupta with the pillar on which the inscription has been worked out. The last part which forms the very foundation for the compilation of the whole work, and the concluding verse, deserve a detailed examination not only for this reason, but also for the fact, which will be seen if they are rightly understood, that the inscription was not composed, as Mr. Fleet assumes, after the death of Samudragupta. They are to be translated in the following manner, according to my interpretation:—

Lines 30-31—'This high pillar is, as it were, the arm of the earth raised up, which announces that the fame of Samudragupta, the illustrious lord of great kings, greatly augmented through the conquest of the whole earth, filled the whole surface of the earth, and found a lovely, happy path in that it wandered from this world to the palace of the lord of gods.'³⁴

Verse 9—'And the glory of this (ruler), which rises up in layers one above the other, through his generosity, his bravery of the arm, his self-control, and his perfection in the science of letters, and which follows more than one path, purifies the three worlds, like the white waters of the Gaṅgā, which rises up in even higher floods, follows more than one path, and dashes forth rapidly freed as it is from the imprisonment in the inner hollow of the braid of hair of Paśupati.'

For the explanation of this translation, the following should be noticed.

1. The word *ucchāhṛita* (l. 30) refers to the arm as well as the pillar, for it is only the raised arm pointing to heaven that can announce the fact that the king's glory has gone up there. The poet here has the *Sleśha* or paranomasia in view, and the word is, therefore, to be translated twofold. It is possible that the word *ucchāhṛita* as taken with the pillar may mean 'erected' (just here), instead of 'high'; but to decide which of the two meanings is intended, we must know further particulars regarding the working of the inscription.

³⁰ The title *kumāradmātya* 'counsellor or minister of the royal prince' corresponds probably to the title at present in use in Gujerāt, i. e., *Kutvārjīno kārkhārī* 'the manager of the prince'. At all the great courts in Kāthiāwār and Rājputānā, the adult princes as well as the Chief Queens have their own *kārkhārī* who look after their private affairs. The minister of an Andhra queen is mentioned in the Kapharī inscription No. 11 (*Arch. Surv. Rep. W. Ind. Vol. V, p. 78*).

³¹ I take this word to be a title, which, however, I am not able to explain. [The translation above is grammatically wrong.]

³² The expression *anukṛāntam* will signify that Tilakabhaṭṭa who, as his title and name show, was a Brāhmap of a high military rank, superintended the preparation of the fair copy and the engraving of the text; Cf. the use of the word at the end of the Gīrnār inscription, below.

³³ See, for instance, *Kādambarī*, pp. 5-6, 53-56 (ed. Peterson); *Harshacharita*, p. 162-179, 227-229, 267-271 (Kāśmir ed.) and especially *Vāsanadattā*, p. 121-129 (ed. Hall), where in the midst of prose, four verses have been interwoven.

³⁴ For the sake of comparison, I give Mr. Fleet's translation of this passage, which differs from mine. 'This lofty column is as it were an arm of the earth, proclaiming the fame—which having pervaded the entire surface of the earth, with (its) development that was caused by (his) conquest of the whole world, (has departed) hence (and now) experiences the sweet happiness attained by (his) having gone to the abode of (Indra) the lord of the gods—of the Mahārājādhirāja, the glorious Samudragupta.' The points requiring explanation are: (1) the addition of *has departed and now*, (2) the translation of *vicāraya* by *experiences*, (3) the insertion of *his i. e. of the king, before having gone*.

2. As regards the translation of the word *vicharaṇa* by 'path,' it is to be observed that the synonyms *charaṇa*, *gamana* and *yāna* are given in this sense in the Petersburg lexicon, and that this sense is justified by the statements of the grammarians about the suffix *ana*. According to them the suffix *ana* serves to denote the means; and the path is, according to the Indian conception, one of 'the means of going.'

3. The adjectival phrases *uparyupari-tashchayochchhrita* and *anekamārga* must be translated in two ways, like *uchchhrita*, because they refer both to the glory and to the river Gaṅgā. As applied to the glory, the first compound means that Samudragupta's generosity, bravery, self-control and knowledge of the letters form the layers by which the glory towers itself up to the height of a mountain, and that every quality that follows, is higher and more excellent. As applied to the Gaṅgā, the adjective alludes to the Indian belief that this river is first visible in the heavens as the milk-path, then dashing through the mid-region, it falls upon the Kailāsa and lastly it rushes downwards to the plains. Thus to the looker-on, standing on the plains and looking upwards, the water of the Gaṅgā would appear to be towering in ever-rising layers. *Anekamārga* lit. 'which has more than one path,' as applied to glory, means, not only that the glory travelled in the three worlds, but that it followed different paths in the sense that it sprang from different causes such as generosity and so on. As applied to the Gaṅgā, the word has only the first sense and it is well known that the Gaṅgā is called *tripathogā*.

According to the translation given above, the last part of the panegyric tells us that Samudragupta's fame, which is personified as a female, as is frequently met with in Indian poets, occupied the whole earth, and thus found it impossible to spread forth any more on this earth. Thus embarrassed, the fame went up to the palace of the lord of gods and thus found a new path for itself, along which it moved happily. Verse 9 informs us of the result which was brought about by this ascent to heaven. Then, says the poet, the king's glory attained to a similarity with the Ganges. For, like the same, it flows through the three worlds: heaven, mid-air, and earth. Every one of these thoughts and images occurs frequently in the court poets. Almost in every *prāśasti* and in a large number of *chāṭus* or verses containing flattery, it is told that the glory of the king under description rushes forward into heaven. The most usual expression used to convey this thought is the statement that the glory of such and such a person fills up the three worlds. There are many places, however, where the ascent of fame, as here, is spoken of, and the figurative motive for the same is also given in different ways. Thus it is said in a verse of the poet Amṛitadatta who was a contemporary of the Kaśmīrian Sultan Shāhabuddin (1352-1370 A. D.), *Subhāshitāvalī* No. 2457 (Peterson's edition):³⁶

कीर्तिस्ते आतत्राद्येव चतुर्मुधिनज्जनात् ।

आतपाय धरणाय गता मातंश्चमन्डलम् ॥

'Thy fame, oh lord of the earth, which was, as it were, benumbed with cold, through its bathing in the four oceans, went up to the sphere of the sun, in order to warm itself.'

Another conception we find in Sambhu, the bard of the king Harsha of Kaśmīr (1089.—1101 A. D.) in *Rājendrakarṇapūra*, verse 67, (*Subhāshitāvalī* No. 2627):

कान्तारेषु च काननेषु च सरिर्सीरेषु च स्नाभृता

मुस्तङ्गेषु च पत्तनेषु च सरिर्द्रुत्स्वदान्तेषु च ।

आन्ताः केतकगर्भपद्मवत्तुः आन्ता इव स्नापते

कान्ते नन्दनकन्दलीपरिसरे रोहन्ति ते कीर्तयः ॥

'Thy glory, oh lord of the earth, which shines white like the inner sprouts of the *Kela*, wandered about in forests and groves, on the banks of rivers, on the slopes of mountains, in cities and on the shores of the ocean; and then, as if exhausted (by this long journey), it sprouts up (as white flowers) on the lovely plots of plantain trees in the garden of gods.'

These modes of expression are quite complex and bombastic in comparison with Hariśeṣa's simple and natural conception of the motive for the ascent of fame. No doubt, this is accounted for by the change in the Indian taste, which was brought about in the long period that separated these three poets.

³⁶ See *Subhāshitāvalī*, introduction p. 4; and Prinsep, *Indian Antiquities*, Vol. II, p. 247.

Not less familiar is the comparison of a king's glory with the Ganges, which flows through the three worlds and purifies them. Thus it is said in a verse of Paṇḍit Kṛishṇaka, *Subhāshitāvalī*, No. 2556 :³⁰

सा कदातास्ति जगत्तये सुरनदी सा संभ्रूहामयी
 सेषा शेषतुषारसौमसुषनाचीरी गुणैर्निर्मले ।
 उक्ता सा भवसीवकीर्तिगुलनीचित्त्वं भजेत्सा न चे-
 द्भूपालसमयेषा संततमधोयानेकताना भवेत् ॥

This would quite suffice to show that the ideas contained in the concluding part of the panegyric, according to the translation above, are current in court poets. This itself vouches for the correctness of the proposed interpretation and proves the fact that this part of Harisheṇa's composition has been written in the *kāvya* style.

To turn from this digression to the examination of the form of the panegyric, we must begin with remarking that Harisheṇa, like Vatsabhaṭṭi, tries to introduce too often a change of metre in his verses. Thus, of the verses partially preserved, three (3, 5 and 8) are composed in *Śṛṅgādhā*, two (4 and 7) in *Śārdūlavikrīṭita*, and one each in *Mandākrāntā* (6) and *Pritho* (9). The bad caesura comes only once in the third *pāda* of the last verse. The language of the verses is, on the whole, simple, and especially the compounds of extraordinary length which are found used by Vatsabhaṭṭi, are carefully avoided. With the prose part of the panegyric, however, things are quite otherwise. Here, simple words are only the exception, while very long compounds are the general rule, the longest compound word (l. 19-20) containing more than 120 syllables. There cannot be any doubt that this contrast is intentional. Because all the manuals of poetics are unanimous on the point that the essence of elevated prose to be used in romances and stories consists in the length of compounds; while the different schools are not so unanimous regarding the admissibility of long compounds in verses. Thus Daṇḍin says in *Kāvyādarśa* I, 80-81 :—

श्रीजः समासनूतस्त्वमेतद्गद्यस्य जीवितम् ।
 पद्येष्वस्योपात्तानां निश्चयेकं परावचनम् ॥ ७० ॥
 तदुक्तं लघूनां च बाहुल्यात्पद्ये निश्चयः ।
 उपावचनकारं तदुद्भवमाख्यायिकावितु ॥ ७१ ॥

81. 'The grandeur (strength) (of language consists) in the frequency of compounds; it is the very life of (poetic) prose. Even in verses, it is regarded as the main feature by those who do not belong to the southern school.'

82. 'It is of many kinds, according to the mixture of a larger or smaller number of long or short syllables; and is found in romances and other similar works.'

Daṇḍin's statement leaves no doubt about the fact that Harisheṇa follows the style of the southerners, the so-called *Vaidarbhī rīti*, which must have enjoyed in the fourth century the same high esteem as in later times, when a large number of writers belonging to the different parts of India advocate it as the most beautiful. Harisheṇa, however, could hardly have come from the south of India. His station at the court of Samudragupta shows that he lived in the north-east, in Pāṭaliputra,³¹ and probably belonged to a family settled in the same place from of old.

Apart from the use of long compounds in the prose parts, there is nothing very artificial in Harisheṇa's language. Of the *Śabdāṅkūtras*, he uses only the simplest kind of alliteration, the *Varyānūprasa*, and even this occurs principally in the prose-parts³² and that, too, not many times. Of the *Arthāṅkūtras*, he uses *Rūpaka* very often, and *Upamā* and *Śleṣha* more rarely. Two instances where the last *Āṅkūtra*, i. e., *Śleṣha* occurs have been discussed above. A third instance of the same is met with in l. 25, in the epitheta of Samudragupta: साध्वसाधुव्य-प्रलम्बहेतुपुरुषस्त्वयिन्वत्स्व which is to be translated thus :—'Of an incomprehensible prince who is the cause of the elevation of the good and of the destruction of the bad (and thus who

³⁰ Cf. also *Śāṛṅgadhara-paddhati* No. 1263.

³¹ That Pāṭaliputra, and not Kanauj, as is usually supposed, was the capital of the Guptas, follows from the verses from Mr. Fleet's No. VI. translated above on p. 145 wherein the minister of Chandragupta calls himself an inhabitant of Pāṭaliputra.

³² For instance, l. 17: *parajaiśarāṅkīpradāśitoma*; l. 20: *rājagrahāṇamokṣāṇugraha*; l. 25: *vigraheṇato* *lokānugrahaṇa*, and so on.

It is obvious that the short compounds marked 3 and 7 are to serve as resting points, and that the rhythm in 1, 2 and 4, is to remind us of the beginnings of the *Dandakas*.

In Harishena's poetical imagery, we come across many conceptions that are very familiarly met with in the *kāvya* literature. Some of these have been already dwelt upon, while discussing the concluding part of his composition. We now notice a few others. The fragment of verse 3 says:—

'The order of the possessor³⁹ of the true meaning of the *Sāstras* whose heart is highly happy at the association with the good,—multiplied as its power is, by the virtues of the wise—puts an end to the war between good poetry and prosperity and thus enjoys in the world of the learned, a far-extending sovereignty whose shining glory endures in many poems.'

Here we have the exceedingly favourite allegory of the fight or discord between the Muse and the Goddess of wealth, which condemns the poet and the learned man to poverty and makes the rich incapable of service to Wisdom and Art. By way of comparison, I quote here from the classical literature only the *Bharatavākya* at the end of the *Vikramorvāśī*, where Kālidāsa prays that this antagonism should cease:—

परस्परविरोधिन्वैरिक्संभद्रुर्लभम् ।

संगतं श्रीसरस्वत्योर्भूतयेस्तु सदा सताम् ॥

'May the union of the mutually hostile goddesses *Srī* and *Sarasvatī*, which is to be found only rarely in one place, bring good luck to the good !'

Further, the author mentions in verse 8, which will be given yet more fully later on, amongst the high excellences of the king, *शुशिकरमुचयः कीर्तयः सप्रतानाः* 'the fame sprouting forth, shining purely like the moon' and thus bears evidence to his being aware of the well-known idea of the *kīrticullī* or the creeper of fame, which covers over the three worlds with its tendrils. With this may be compared in the field of classical literature, *Śārngadhara-paddhati*, No. 1235.

A third most favourite poetic representation of fame is met with in the second compound in l. 23, referring to *Samudragupta*:—'Whose fame arising from the re-establishment of many fallen kingdoms and of many extinguished royal races, is tired by its journey through the three worlds.' Hemachandra also in the *prāśasti* to his grammar, verse 29, similarly speaks of the want of rest for his master's fame:⁴⁰

यदोर्मण्डलकुण्डलीकृतधनुर्दण्डेन सिद्धाधिप

कीर्तिं वैरिकुलात्सया⁴¹ दत्तकुण्डावदानं यदाः ।

भ्रान्त्वा त्रीणि जगन्ति खेदविवशं तन्नालवीनां व्यधा-

दापाण्डो स्तनमण्डले च धयले गण्डस्थलेवस्थितिम् ॥

'With the bow bent into a circular form by your arm stretched round, you won, oh king *Siddha*, your fame that shines whitely like the blooming flower of the *jasmin*; being rendered helpless through the exhaustion of wandering through the three worlds, that your fame has at last rested itself on the palid, round breasts and the white cheeks of the *Mālava* women.'

In l. 25, again, we have quite an original conception which is meant to illustrate how far *Samudragupta*'s glory obscured that of all his rivals. The poet there praises *Samudragupta* as a ruler 'who, in consequence of the overflow of his many virtues elevated through hundreds of good works, wiped off with his feet the fame of other kings.'

The idea seems to be that the leaves, on which the fame of other kings is written, lie before *Samudragupta*. The flow of his virtues streams over them, and he is only required to stir his foot, to obliterate the praises of the rulers of antiquity.⁴² I cannot point out anything in literature, which exactly corresponds to this. Nevertheless, it cannot escape the attention of any one, that the conception quite fits in with the character of the style of court-poets.

In the next line (26), we meet with a comparison which occurs frequently in the epics and which is used in later times by almost every classical poet and in every *prāśasti*—where *Samudragupta* is celebrated as a king 'who resembles *Dhanada*, *Varuṇa*, *Indra* and *Antaka*, i. e., the guardian-gods of the four directions.' Equally favourite is the immediately following *Upamā*: 'who puts to shame the preceptor of gods by his sharp and subtle understanding, and *Tumburu*, *Nārada* and others, by his lovely performances of music.' About the comparison of the king with

³⁹ I. a. of *Samudragupta*.

⁴⁰ Cf. also the verse quoted above on p. 175 from *Rājendrakarnāpūra*.

⁴¹ In the second line, two letters seem to be wanting between सया and दत्तम्.—V. S. G.

⁴² As it appears to me this passage presupposes the use of the colour usually prepared from soot and gum Arabic in old times, which was used for writing on palm leaves, as the *Horizmi-MS.* shows. The oldest full description of such MSS. can be had from the different passages of *Subandhu's Vāṇavāda*.

Bṛihaspati, we have spoken above on page 144. As for the statement that Samudragupta was a better musician than the well-known Gandharva and the sage of gods who invented the *śiṅḍ*, an explanation is furnished by the coins, as Mr. Fleet has pertinently remarked, on which Samudragupta is represented as a lute-player. For the last climax of hyperbolic representation, we also meet with analogies in the *kāvya*s. When Harishēpa says in l. 27-28, that his master is 'a god dwelling in this world, whose many marvellous and noble deeds deserve to be praised for a very long time and who is a man only in that he performs the acts necessary according to the conventions of the world,' we are reminded, in the first place, of Bāga's description of his patron, Harsha (*Śrī-Harsha-charita*, p. 207-208), where his deeds have been put on a level with those of Indra, Prajāpati, Viṣṇu and Śiva, and he himself has been identified with these gods. A still more important parallel is provided by the statements of the Prākṛit poet, Vākpati, about Yaśovarman of Kanauj (*Gaṇḍaśho*, verses 167-181), according to which, the king is an incarnation of Bālaka-Hari or Viṣṇu. As is to be expected of a poet of the eighth century, Vākpati expresses the idea with a greater elaboration of details⁴³.

Many more points of relationship with the *kāvya* literature can be discovered in the individual expressions of our *prākṛiti*. It would suffice if I only point to *upaguhya* (for *āśishya*)⁴⁴, *bhāva-piṇḍa*, *mīḍa-ānana*, *aneha-vyādhita*, *bāṣpa-guṇa* (all in verse 4), *adḥat-adbhūta-Aaraha* (verse 5), *ushahāpakāra*, *toṣa-ottuṅga*, *aneha-phulla*, and the frequent use of *sphuta*. The parallel passages given in both the Petersburg lexicons spare me the trouble of giving here many new quotations. Whoever is familiar with the diction of the *kāvya*s, will not require any special proof, but will at once recognise the affinity of these and other modes of expression to those used by classical poets.

Now, we have to notice a number of cases, especially in the prose part, where Harishēpa obviously tried to surpass his rivals in the composition of *prākṛiti*s. To this category belong most of the long compounds in lines 17-24, in which the closing part especially comes now and then as a surprise and deviates very much from the usual track. Thus, in line 21, for instance, instead of saying that Samudragupta had acquired great power through the forcible extinction of many kings of Aryāvarta, Harishēpa represents his master as a prince 'who was great through his power which expanded itself through the forcible extinction of many kings of the land of the Āryas.' Perhaps, the simple and natural expression *प्रसमीदुरनलम्बनमहाप्रभावस्य* appeared too trivial to the poet, and, for that reason, he went in for the more artificial one *प्रसमीदुरनीलप्रभावमहः*. So also the last parts of the following compound phrases are unusual and deliberately sought :—

1 (l. 22-23)—'whose fierce sovereignty (the neighbouring kings) propitiated, by means of the payment of all the taxes (levied), the carrying out of his orders, salutations and visits,'
2 (l. 25)—'the mighty bravery of his arm which held the whole earth in bondage, received homage from the inhabitants of all countries, in various ways, such as causing themselves to be presented to him, offering daughters and other presents, and requesting him for a decree with the Garuḍa seal for the possession of their country,' 3 (l. 26)—'whose heart had willingly received the formula and the consecration for the deliverance of the poor, the miserable, the helpless and the sick'. Whoever will take the trouble of reading through other published *prākṛiti*s, will easily see the originality of these modes of expression and judge of them according to their worth. The fact, however, that Harishēpa makes use of deliberately sought modes of expression is to be explained by the existence of many other similar panegyrics whose simple and unadorned diction he tried to surpass.

The most clear proof, however, for the fact that Harishēpa's composition does not at all belong to the beginning of the *kāvya* period, is provided by those passages in which he speaks of the king's peculiar poetic activity. In this connection, we should refer above all to what we have of the eighth verse, wherein the poet declares :—

'He alone is worthy of the thoughts of the learned ! Because what excellence is there, which would not be his ? He has made firm the barrier of law, his is the sprouting fame that shines purely like the rays of the moon, his the wisdom which pierces down to the truth, his the self-control, his the poetic style which is worthy of study, and his are the poetic works which multiply the spiritual treasures of poets.'

In the second part of his composition, Harishēpa again refers to the last point when he says in l. 27 that Samudragupta's 'title as the prince of Poets was well established by the composition of many poems worthy of the imitation of the learned.' If one adds to this, verse 3 spoken of above on page 176 and the expressions used by Harishēpa about his person, it naturally follows that, during the reign of Samudragupta, the *kāvya* literature was in full bloom, and that the conditions at his court were absolutely similar to those which are reported to have prevailed in later times at the courts of Kanauj, Kāśmīr, Ujjain, Dhārā and Kalyāṇi, and which are found to exist even to this day, here and there in India. The cultivators of Sanskrit poetry, who were called by the names of *kavi* or *budha* or *vidvān*, were not born or self-taught poets, but were professional learned

⁴³ The deification of the king is already found in old times ; e. g. in *Mānava-dharmaśāstra* VII, 4-9.

⁴⁴ See above p. 143.

men or Paṇḍits who studied the *śāstras*, i. e., at the least, *Vyākaraṇa*, *Kośha*, *Alaṅkāra* and *Chhandas*, and who wrote according to the hard and fast rules of poetics, as is shown by the form of Harisheṇa's little composition. The Sanskrit *kāvya*, which owed its origin to the court-patronage, and which can exist only by means of the same, was assiduously cultivated at the courts. The king supported and raised to honour, such poets, and even he himself, and with him his high officers, too, emulated with their protégés. Perhaps he had even a *kavirāja*, or a poet-laureate, appointed. At any rate, the title, as such, was in use in the days of Samudragupta, the title which in later times occurs very often in Sanskrit literature, and which, even at present, is given away by Indian princes, associated as it is with many benefits. His court could not thus have been the only one which patronized the exertions of the Paṇḍits in the domain of poetry.

(To be continued.)

MISCELLANEA.

A NEW LIST OF BUDDHISTIC SANSKRIT WORDS, by
Prof. Sylvain Levi and G. K. Nariman.

THE *St. Petersburg Dictionary*, a monument of Germanic erudition, published at the expense of Russia, contains an almost exhaustive inventory of Vedic and Brahmanic Sanskrit. Buddhism hardly appears in it at all. The authors of the *Dictionary* and their collaborateurs make use of a few meagre texts only. But in the last forty years the material for Sanskrit Buddhism has vastly increased. The published texts have revealed a perfect treasure of words which classic Sanskrit had ignored or neglected. A Buddhistic Sanskrit Dictionary is one of the

tasks to be undertaken in the near future. Meanwhile, it is of importance to elaborate the materials so as to put them on some sort of working basis. Cowell and Neil have given an excellent model in the glossary that they have added to their edition of the *Diṅyavaddāna*. Mr. G. K. Nariman has been good enough to prepare the list of new words that I have pointed out in my notes on the text and translation of the *Mahāvāna Sūtrāṅkāra*. It may not perhaps be superfluous to place this list at the disposition of philologists, who are interested either in Sanskrit or Buddhism.

SYLVAIN LEVI.

A list compiled by G. K. Nariman of new words unknown in classical Sanskrit and not yet met with in Buddhist Sanskrit except in the *Mahāvāna Sūtrāṅkāra* of Asaṅga, edited and translated by Prof. Sylvain Levi.¹

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Abhiprāyika	138	Jagupain	173
Adhimucyana	71	Kaukṛtyāyate	72
Adikālika	159	Naiyamyā	166
Adhyavibhāsaka	31	Nirabhisamskāra	161
Akilāśikṛta	78	Nirjalpa	138
Akilāśitra	86	Nirmṛgya	130
Anukshudra	56	Paribhāṇika	111
Antarāyina	3	Parijñātāvin	159
Anuśāsani	20	Parinirvāpāna	35
Āpāyika	150	Paripantha	51
Apratiprasarabdhā	37	Pārthagjana	85
Arihat	127	Paryeshā	168
Atilajjanā	18	Prābhāṇika	28
Aupalambbhikṛta	49	Pratidesanā	71
Ayonisatas	132	Pratyavagama	5
Balika	143	Pratyupasthāyin	150
Bhājanibhāva	116	Pravedanā	51
Citrānā	40	Priyānā	71
Dauṣaprajnya	101	Prodbhāsa	62
Eśhikā	50	Samāddāpanā	116
Hāyina	94	Samādhi	52
		Samāśasti	90
		Samavaghāta	55
		Sāmbhogika	45
		Sāmbhogya	45
		Saradosha	21

¹ The spellings of the words in this list are given as they are published in Prof. Sylvain Levi's book.

	PAGE		PAGE
Sāṃkṣepika	62	Tāyaka	124
Sammosha	186	Upamīśra	119
Samprapatti	28	Upaprayati (?)	145
Sampravaraṇa	29	Vaiṣṭhuvika	75
Samtiritā	138	Vardhaṇā	128
Samudghātana	108	Varjaṇā	28
Sānurakṣa	130	Vikopana	114
Sārdhamvihāra	164	Vilomayati	4
Saritā	80	Vivarnayati	83
Sātata	23	Vyavakirana	181
Strutka	62	Vyāvanāyika	142
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A NOTE ON SIVA-BHAGAVATA.

THE mention of *Śiva-Bhāgavata*¹ in *Patañjali-Mahābhāṣya* is no doubt a proof that the Śaiva sect existed in the days of Patañjali. But that the Viṣṇu-cult is anterior to the Śaiva cult, whenever the latter came to be formed, is also proved by this compound word. Bhāgavata is a worshipper of Bhagavān, the latter being a name peculiar to Viṣṇu. See *Viṣṇu-Purāṇa* and my notes on Bhagavān in the *Journal, R. A. Society*, London. The Bhāgavatas, or those who belonged to the Viṣṇu cult, are contemporaneous with the

Vedān. When the Śaiva cult was inaugurated, it was felt to be necessary to appropriate this term of high and hoary sanction. In adopting it, therefore, it was also necessary to add a distinguishing mark showing the differentiation of the new cult from the old one. That mark was, of course, Śiva. This was added; and the compound word Śiva-Bhāgavata was thus launched into the world of the Sanskrit Grammarians.

A. GOVINDACHARY SVAMIN.

MYSORE, VEDA-GRHAM.

NOTES AND QUERIES.

ALOPEH AND SILADITYA².

PROFESSOR TAKAKUSU (*I-tsing*, p. xxviii, n. 8) states that Alophen, the Nestorian missionary to China, visited Silāditya, in India, in the year 639 A.D. This statement is based on a remark of Edkins, quoted in the *Athenæum* of July 3, 1880, p. 8. Back numbers of the *Athenæum* are not readily available, and more than one writer has accepted Takakusu's account, without testing it as an important contribution to the history of Christianity in India. I myself did this in the

article *Bhakti-mārga*, in Hastings' *Encyclopædia of Religion and Ethics*, Vol. ii, p. 548.

Since then, the statement has been called in question, and I have been able to trace it to its source. I now hasten to correct any wrong impression which may have been caused by my trust in Takakusu. He is quite wrong, and has entirely misunderstood Edkins. In the passage referred to, Edkins is not dealing with Silāditya, but with the Emperor of China.

CAMERONLEY.

GEORGE A. GRIERSON.

BOOK-NOTICE.

ANECDOTES OF AURANGZIB (Translated into English with Notes) and Historical Essays by JADUNATH SARKAR, M.A., Professor, Patna College. M. C. Sarkar and Sons, Calcutta, 1912. Rs. 1-6, pp. 242.

This little volume consists of three parts. (1) A short account of the life and reign of Aurangzib. (2) A collection of anecdotes regarding that great emperor. (3) Miscellaneous essays dealing with the reigns of Shāh Jahān and Aurangzib.

Of these, the second part is of real value to English students desirous of closer acquaintance with the individuality of the last of the great Mughal rulers. Here we have Aurangzib as courageous youth, jealous brother, ardent lover, stern parent, administrator of justice, upholder of royal prerogative and disappointed dreamer. The anecdotes have lost little of their

vigour by translation and the editor has elucidated the text by valuable notes.

The third part is necessarily more fragmentary, but all the essays are brightly written and several contain information not hitherto available to the English student, notably those entitled "The Companion of an Empress" and "Daily Life of Shāh Jahān." The final essay, describing the self-sacrifice of Khān Bahādur Khuda Bakhsh in collecting the nucleus of a "Boo'eian" Library at Patna will be read with deep interest by those hitherto ignorant of what this public benefactor accomplished for his own country. It is a pity that the learned author occasionally uses slang expressions, evidently under the impression that they are idiomatic English.

L. M. A.

¹ *Ante*, Vol. XLI., p. 372.² Reprinted from the *Journal of the Royal Asiatic Society*, January, 1913, p. 144.

THE OBSOLETE TIN CURRENCY AND MONEY OF THE
FEDERATED MALAY STATES.

BY SIE E. C. TEMPLE, BART.

(Continued from p. 159.)

APPENDIX III.

Extracts from

Millies, *Recherches sur les Monnaies des Indigènes de Malaisie*. La Haye, 1871.

(Translated).

I. pp. 130 ff. Beaulieu is, I think, the first to mention the coins of Kedah: "They cast (says he) money somewhat of the material of French *sous*, of a little better alloy however, which they call *tras*, 32 being worth a dollar. They (the people) count by *taels* (*tahil*), but a *tael* there is worth four of the Achin (*tael*)."³⁵

The name *tras* or *teras* for a coin is not otherwise known to me, but I think it must be explained by *tra*, stamp, mark, which Marsden quotes in the term *tra timah*, lead (or tin) marked (to give it currency).

Mr. [J. R.] Logan, *Journal of the Indian Archipelago*, Singapore, 1851, p. 58, says,³⁶ in 1850, that the native coin is the *tra*, a small round piece of tin, with a hole in the centre, of which 160 make a *tali* and 8 *tali* are worth a dollar.

Tavernier is the very first to publish some coins "of the King of Cheda (as he writes the ordinary name Quedah) and Pera." In the second part of his work (*Les six Voyages de Jean Baptiste Tavernier*, Paris, 1679, Pt. II.) p. 601,³⁷ he says that "the King struck no other coin than of tin," and he gives on the accompanying plate under Nos. 1 and 2 the "figure of a great piece of tin" It is the only specimen of the celebrated traveller's collection which I have unearthed in the Musée Numismatique of the Bibliothèque Impériale at Paris. I give a drawing of it as I saw it, but it has suffered much during these two centuries.³⁸ The piece is octagonal with two lines in relief parallel to the edge. Between these lines there are some dots. There is no hole in the middle, but a small square, which Phayre thought to be a rough image of the *chaitya* on the ancient Buddhist coins, with a central chamber for relics (?). Crawford, who copied without remark Tavernier's coin, thought that this square represented a hole, and had the coin engraved with a hole on the obverse, but without a hole on the reverse!³⁹ Round the square are some characters which I have not been able to decipher. The reverse, which has some lines in high relief, parallel to the edge, with larger dots between the lines, bears in the drawing of Tavernier the figure of a serpent in the field.

There is in the same Museum a piece of tin of a similar type to the above specimen, with nearly similar characters, but it is round in form, and has on the reverse a figure which resembles a lotus flower.⁴⁰

Despite the authority of Tavernier, who, however, did not visit the Malay Peninsula himself, I doubt whether his coin belongs to Kedah or Perak. Not only is it unlike any of the known

³⁵ *Relation de divers Voyages curieux*, etc. Paris, 1666, Part II., p. 83. Beaulieu is probably here contrasting the difference between the silver standard of Kedah and the gold standard of Achin.

³⁶ This is from a footnote.

³⁷ *Vide* page 6 of the English Translation of 1678. See *ante*, p. 30.

³⁸ Plate XXII, fig. 230.

³⁹ *Hist. of Ind. Archipel.* I. p. 253, plate 6 M. de Chandoir, *Recueil de monnaies de la Chine*, St. Petersburg, 1842, has also repeated the obverse (Pl. LIX, No. 26), but by a mistake of his in the catalogue and on p. 79 we find "after Basile" instead of "after Crawford."

⁴⁰ Phayre gives a drawing of a similar piece of money, without explaining the legend (Pl. XVI No. 4).

Malay coins, but also the characters on it do not appear to be Arabic, as would be expected at that time. On the contrary, the type resembles the coins which were in use in the neighbouring countries to the North, either on the coast of Tenasserim or Burma.⁴¹ Pieces of a similar kind, probably called *kebean*,⁴² which I know, and of which I have seen a good specimen in the Musée Numismatique de La Haye, usually bear on the obverse a circle with an eight-pointed star, and round it a legend in Pali in Burmese characters, and on the reverse a fantastic figure of a quadruped, probably of a *sinha* or lion, or according to Phayre of a fabulous animal, called *to* or *nayā*⁴³ in Burmese mythology, made up of a winged horse and a deer. Paulin de Saint Barthélémy (Fr. Paulinus), missionary to the Indies, was the first to attempt to explain one of these coins,⁴⁴ and quite lately⁴⁵ Lt. Col. A. P. Phayre has given drawings of a number of those which are to be found in the Museum of the Asiatic Society of Calcutta [A. S. Bengal], but [both] without adding much light which would extend the knowledge of these numismatic remains.

The other coin (his Plate, Nos. 3 and 4) which Tavernier attributes to the King of Kedah and Perak is of quite a different character: "The little coin, (says he) passes at the value of 4 *deniers*." It is unfortunate that Tavernier's drawing is so badly executed, that it is difficult to decipher the legend. Still, I think I can distinguish the ordinary formula of the [Muhammadian] creed—*la illaha ill' illahu muhammadi' r-rasulu' llahu: sarb fi . . . sanat' 1041? . . .* There is no God, but God: Muhammad is the Prophet of God: struck at . . . year? 1041? (1681-2). Unfortunately the name of the town has been injured,⁴⁶ but it must be confessed that what remains visible does not appear to agree with the name of any known locality in the State. The date is also very doubtful. The type of this side (of the coin) resembles the obverse of the Persian coins of the Saffis; but the Shiah formula [of the creed] *Ali walis' llah* [Ali is the Prophet of God] is not visible in the drawing. The reverse, which seems smaller, does not bear anything but some ornaments. In the centre is an eight-pointed star, or rather a wheel, encircled by a garland of flowers and fruit, with a milled edge. Gemelli Careri, *Giro del Mondo*, Vol. II., p. 148, without quoting the source, has reproduced this coin the wrong way round.

2. p. 133. After Tavernier we find hardly any mention of Kedah coins. However, I have discovered one (which is published by Marsden), but having been wrongly read has remained unrecognised. This piece is (what seems to me very remarkable) of silver . . . The obverse bears: *bubalad' Kedah daru' l-aman*.⁴⁷ *sanat' 1154*, in the country (or kingdom) of Kedah, the abode of peace, year 1154 (1741-2).⁴⁸

3. p. 137. In the Royal Numismatic Cabinet at the Hague I discovered a copper coin of Kedah, so far, unique.⁴⁹ Its weight is 1½ grs. The obverse bears . . . *Kedah*; the reverse, *daru' l-aman*: Kedah the abode of rest. The first word is too indistinct for me to dare to define it.⁵⁰ . . . This piece bears no date.

⁴¹ Millies was however, not aware of the fact that the Burmese legend gives the mint in Pali as *Mañjantika nagara*, which exactly translates *Daru' l-aman* or Kedah, on the Kedah coins. see ante, p. 65.

⁴² Cf. J. R. A. S., 1896, III. 301. [This is, however, a mistake. The weight and value do not admit of the suggestion. These coins must have been about 5½ cents in value (ante, p. 31), whereas the *kebean* = *keping* were worth about 1 cent. See the quotation from Wilson, *Documents of the Burmese War*, 1827, ante, p. 36 and Pl. V fig. 3.]

⁴³ This is really a compound expression, *to-nayā*, a winged *to*.

⁴⁴ *Systema Brahmanicum liturgicum mythologicum civile ex monumentis Indicis Musii Bergiani Velitris*, Rome, 1791, p. 217, Pl. 31, No. 12. Phayre, J. A. S. B. 1883, No. 291, pp. 271-3.

⁴⁵ Millies is writing before 1896, when he died.

⁴⁶ I entirely agree with Millies' reading and would like to go further and read *sarb fi Kedah*, struck at Kedah.

⁴⁷ *dar* is for *dar*.

⁴⁸ Plate XXII fig. 234.

⁴⁹ Plate XXII, figs. 231-232.

⁵⁰ *Ma* is not read *Mañjantika* Kedah; Kedah, money.

I am indebted to the kindness of Mr. Logan of Singapore for several pieces, unfortunately badly preserved, which belong to the class of *ira*, or modern tin coins of Kedah. I will describe those of them which are the most distinct.

A round tin coin⁴¹ with an irregular hole: diameter, 23 mill.; weight, 1.85 grs. The obverse bears *dar* (sic) -u' l-*aman* (sic) *balad Kedah*; the country of Kedah, abode of peace. The reverse: *tahan alif*, 1234 (1809-10). The first and fourth words of the obverse and the second of the reverse are written contrary to orthography. Also if the word *dar* were not very distinct, one might read *zarb* *fi* [struck at]. Moreover the second and the fourth figures of the date are not very distinct on the coin, but nevertheless I think I can read the year 1224 by the accompanying definition *tahan alif*, the year A.

4. P. 138. One more piece of this State,⁴² diameter 24 mill. and weight 150 grs., though of modern date, offers several difficulties in reading and explaining. I think I can read on the obverse: *belanja balad* (?) *al-parlis qadah*: *sanat* 1262, money of exchange of the country of Perlis, Kedah: year 1262 (1846). On the reverse is seen a lotus flower of five petals. The Malay word *belandja* [*bélanja*], revenue, expense, is moreover in use in the Malay Peninsula to indicate money of exchange. But the third word with the [Arabic] article seems to me so peculiar, as to leave me in doubt. I have found no explanation of it. I have never seen the name Perlis written in Malay characters, but as it is the name of one of the principal towns, which has often been the capital of the State, this name seems to me most probable.

5. P. 145. We have not been able to discover any coins which could with certainty be attributed to the other small States in the Southern part of the Malay Peninsula, but we must speak here of a class of tin coins, which though very simple in form, offer several difficulties in determining them. These pieces do not usually bear anything except some titles, either on one face or divided between the two sides; sometimes with, often without, a date.

A large round piece⁴³ of this kind is to be found at the Musée Royal de La Haye. On one side is the whole legend—*maliku' l-adil khalifu' l-muminin sanat* with two figures of a date—13: King [by grace] of the Just [God], the chief of the believers, year—13. From the appearance of the piece I should think that it is not of ancient date and that the year 1213 H. (1798-9) must be meant. Some others, of a little smaller size, in the same collection, appear to be of the same manufacture, but have simply the title without date:—*khalifu' l-muminin*, chief of the believers. In the Musée de Gotha there is to be found a fine example, and two less well preserved specimens in the British Museum, of an octagonal form, without a hole, [but] with the same legend and no date: on the obverse *maliku' l-adil*; on the reverse *khalifu' l-muminin*.⁴⁴

6. P. 147. A learned Malay, who has published several works in his own language, Abdu'llah, son of Abdu'l-kadir, made, in 1838, a voyage from Singapore to Kalantan on the East Coast of the Peninsula. A judicious observer, he noted the most remarkable things he saw, and to please the English he published an account of his voyage in Malay at Singapore in 1838.⁴⁵

Speaking of the State of Trengganu, or Trangganu, on the East Coast, which formerly acquired a certain fame and played, even in the past century, a fairly great part in the political relations of the Peninsula, but which is now fallen into profound degradation, he mentions, among

⁴¹ Plate XXII. fig. 235.

⁴² Plate XXII. No. 236-7.

⁴³ Plate XXIII. No. 240.

⁴⁴ [Plate XXIII. Nos. 251-2.] Perhaps the reading should be rather *Malik-al-'adil*, the just king, or *Milki-l-adil*, legal tender.

⁴⁵ *Bahasa dan Kesah pu-layar-an Abdullah, ben Abdulkadir semah. Dari Singapura ke-Kalantan. Turkarang alih-nya. Singapur, 1254—1838.* (Published also in Malay characters.) M. Ed. Dulaurrier has rendered a great service by making the work better known through his French translation of the Malay text, published under the title:—*Voyage d' Abd-Allah ben Abd-el-Kader de Singapore à Kalantan*: Paris, 1850.

other things, the coins of the country. He says, p. 48, that the money of exchange at Trengganu (*wang blanja negri Trengganu*) is 3840 *pitis*⁵² of tin (*pitis timal*) to one dollar (*ringgit*). They bear an impression of the words *maliku' l-a'dil* and are of the size of our *duit* (*duit ket*). It seems to me from this remark to be very probable that all the coins of this class [above] mentioned belong to the Malay State of Trengganu.

7. P. 149. Passing on to Pahang during his voyage along the same coast, the learned Malay Abdullah complains greatly of the difficulties relating to the monetary system: 16 *tampang* (blocks of tin) are worth one dollar, but cannot be broken up into three *suku*, a half *suku* and one *suku*.⁵³ If we wish to buy an object of very small value, we must give a whole *tampang*. (Cf. text p. 23, French trans. p. 23). Thus this State, once so flourishing, has returned to an almost primitive savagery, where great blocks of tin, the produce of the country, serve as an imperfect medium of exchange.

8. P. 150. I have been unable to discover any ancient monetary remains of this State (Patani), but I have received one coin of a fairly recent date. It is a piece of tin, round in form, with a round hole, larger and heavier than the ordinary *pitis*. The obverse bears the Malay legend: *in [ini] pitis blanja raj [raja] Patani*, this is a *pitis* current of the *raja* of Patani.⁵⁴ On the reverse there is: *khalifu' l-muminin, sanat 1261*, the head of the believers; the year 1261 (1845).

9. P. 151. To the north of Patani is Sanggora . . . It was in the fine numismatic collection of Dr. W. Freudenthal in London, that I discovered a coin of tin of this small State. It is round with a round hole, and, as is perfectly explicable from the above-mentioned notice of Dr. Medhurst, it is trilingual.⁵⁵ That which appears to be the principal side is occupied by a Chinese legend in four characters, which, according to my friend, Professor Hoffmann, should be read: *Tsai-tch'ing tung pao*, coin of Tsai-tch'ing. As however, we have very little means of determining the names which the Chinese give to foreign towns, we should be very uncertain where to find the locality of this Tsai-tch'ing without the help of the reverse. On the reverse is found the same name twice: in Malay in two words, above and below, *Negri Sanggora*, and to the right and left in Siamese characters *Song-khla*, which is [a corruption of] the name in use in that language.

10. P. 152. We ought also to speak of two coins, which, by their texture, seem to belong to the Malay Peninsula, but as to the exact locality of which, we have been unable to arrive at any determination. The first⁵⁶ is a piece of tin, 28 to 30 mill. in diameter, and weighing 4.96 to 6.80 grammes, with a square hole in the centre. The obverse bears the title—*khalifu' l-muminin*, the head of the believers. On the reverse there is nothing but the date—*sanat 1256*, year 1256 (1840-1)—which is clear. The rest shows certainly some Arabic signs, not Siamese as one would imagine after the preceding piece, but I cannot make out the meaning. On five examples, which I have been able to study, all bearing the same date, there is some difference in the signs, but they nevertheless seem to express the same words. On one specimen might almost be read *shahr*, which would recall to memory the name of the ancient capital of Siam, mentioned in the *Sajra Malaya* (*shahr al nawī* or rather, *shahr nawī*, the new city); but besides the fact that this nomenclature,

⁵² I do not know why M. Dulaurier (p. 44) has translated [this]:—"It takes 3880 of them to make a dollar." The corresponding Malay text is clear: *ték ribu dalapan ratus ampat puluh* [3840]. [Read: *tiga ribu delapan ratus empat puluh*].

⁵³ *Suku*, a quarter, is also used for a quarter of a dollar, but here it must, I think, be considered the fourth of a *tampang*. [This argues a great local appreciation of the dollar, as the standard *tampang* is worth 1/10 dollar.]

⁵⁴ Plate XXIII No. 254.

⁵⁵ Dr. Medhurst who visited Singora in 1828 found it divided into three parts, Chinese, Siamese and Malay. See Plate XXIV. No. 255.

⁵⁶ Plate XXIV. fig. 256.

OLD MALAY CURRENCY.

Plate IV.

Burmese and Tenasserim Weights and Money

Indian Antiquary



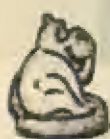
1



2



3



4



5



6



7



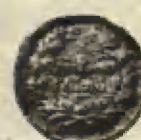
8



9



10



11



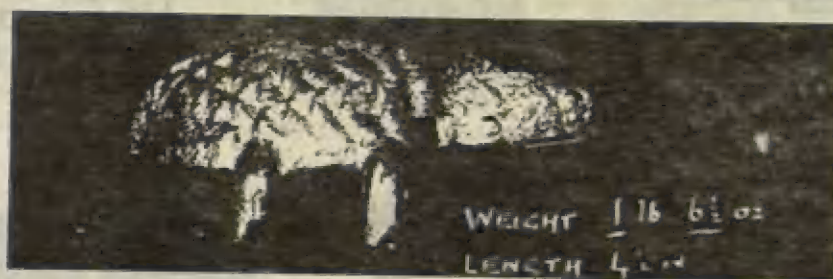




Fig. 1. Coin of Salamis in Cyprus.



Fig. 2. Egyptian Wall Painting showing the Weighing of Or and Ring Weights.

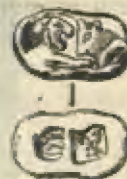


Fig. 3. Coin of Croesus.



Fig. 4. Weights in the form of Sheep.

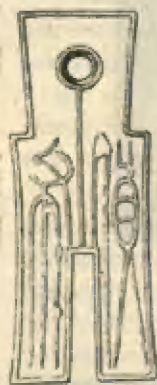


Fig. 5.
Chinese hen-money.



Fig. 6. Assyrian half-shekel weight of the so-called Duck type.

A. Side view showing cancelliform symbol.
B. View from above.



Fig. 7. Bull's-head Five-Shekel Weight.



Fig. 8. Lion weight.

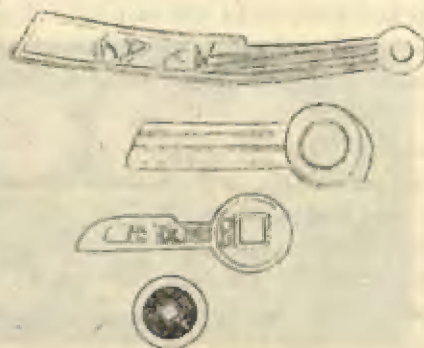


Fig. 9. Chinese Knife Money
(showing the evolution of the modern Chinese coins).



Fig. 1.

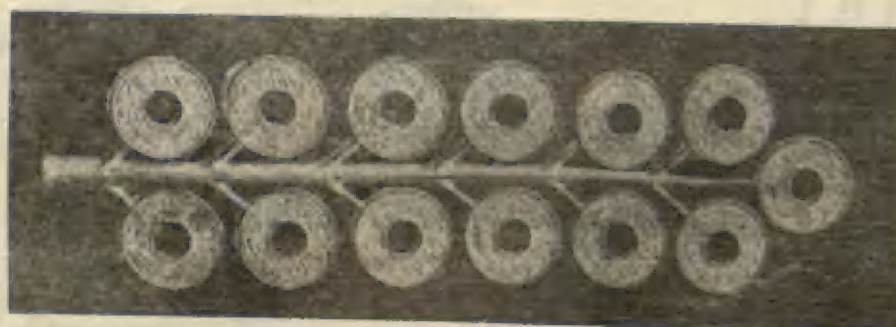


Fig. 2.

taken from the Persian, belongs to a time somewhat distant, the last part (of the name) is not found on these coins. The letters *ba* might be taken for an indication of a year of the short cycle, as on a coin from Kedah; but the preceding signs give as little satisfactory sense as the following ones reading the Arabic word at the beginning as *shahr*, month. Further, it is very improbable that the last signs should be read *sh-ba* for the Arabic *shab* [struck], and that the first signs might indicate the well-known name Ligore or Lagor, Lakhon in Siamese. It therefore only remains for me to confess my ignorance.

11. P. 153. Again, MM. Netsche and van der Chijs have reproduced a tin coin (*De Munten van Nederlandsch Indie*, Batavia 1863, p. 172, No. 226), which I have never seen, but which, although somewhat obscure, seems to me to belong also to the Malay Peninsula. According to their description, it weighs about 5 gr. with a diameter of 32 mill., and has a hole of 13 mill. diameter. One side is blank, the other bears the inscription in [ins] *pitis Jering 1261*. [This inscription puzzled Millies and the others, writing about 1865 and earlier, but from the knowledge since gathered by Mr. Skeat c. 1893, the coin clearly reads as above:—this is a *pitis* (cash) of Jering, 1261:—1845. Plate XXIV. No. 257].

(To be continued.)

ON THE DATE OF LAKSHMANASENA.

BY S. KUMAR,

Supdt. of the Reading Rooms, Imperial Library, Calcutta.

IN this *Journal* for July 1912, Prof. Nalinī Kānta Bhattachāli has contributed a paper on the date of Lakshmanasena, in which he has attempted to uphold Minhāj al-Dīn's story of the conquest of Bengal by Muhammad bin Bakhtyār-i-Khāljī, with a view to controvert an opinion expressed by Mr. R. D. Banerji in a meeting of the Bangiya Sahitya Parishad on the same subject.

The author of the paper having implicit confidence in Minhāj's statement says that a composition executed by an artist of some note has succeeded in stirring up the students of history of our country to examine the story in a critical way. The author should have been aware that the "fresh stir" was not created by the painting referred to by him, but that a note of disbelief had already been struck, and that an attempt at criticising the statement which the author accepts as unquestionably true was first made by the late Bankim Chandra Chatterjāyā.¹

Mr. R. D. Banerji, whom Prof. Bhattachāli controverts, has already laid on the table of the Asiatic Society of Bengal the results of his investigation on the subject, which when published will perhaps yield the soundest arguments and go a great way to establish the historical validity of the statement alleged to have been made by Mr. Banerji. The object of the present note is to point out the fallacies, which are apparent in Prof. Bhattachāli's paper. "Every School boy" is aware no doubt of the daring deeds of the son of Bakhtyār. But does this at all prove that the account is necessarily true? Our school books are not always well-chosen, and the authors, whose profession it is to get them up, do so anyhow, without taking much intelligent interest in their work.

About the four inscriptions which Prof. Bhattachāli has referred to, we have here only a few remarks to make. The name of the king mentioned in these inscriptions is Aśokachalladeva and not Aśokavalladeva, the reading which has been accepted by Prof. Bhattachāli. The name was first correctly read by Dr. Bhagawānlāl Indrajī, and was afterwards emended by Cunningham without much reason for doing so. If Prof. Bhattachāli referred to the inscriptions themselves, or had examined the impressions taken from them, he would have, no doubt, been convinced that the inscriptions, Nos. 2 and 4, on which Cunningham's emendation was based, could not be relied upon. They seem to be very carelessly incised and abound in orthographical errors, and, on a minute examination, it will be found that in these practically very little difference exists between *v* and *ch*.

The trustworthiness of Minhāj's account, which Prof. Bhaṭṭasāli upholds, remains as much doubtful as it had been before he subscribed to it. The contemporary historians whom Minhāj takes as his authorities, with the singular exception of the author of *Tāj al-Māsir*, do not refer to Muhammad bin Bakhtiyār's raids in "Bāngālā". Minhāj visited Bengal about forty years after the raids and collected his account of them from two old soldiers, Samsam al-Dīn, and his brother, Nizām al-Dīn, who were said to have been in the raiding hordes.²

Their account was sure to be an exaggeration if not anything else, and little reliable on the ground that they even did not understand the language of the country, as is to be expected of the pioneer soldiers of a foreign raiding horde; their mistaking a *rūḍra* for a fort and the Buddhist *Sramaṇas* for Hindu *Brāhmaṇas*³ would perhaps be sufficient for us to determine how far their story could be relied on.

In order to magnify their own achievements, they fabricated the story which Minhāj records as true. It was even alleged that when Lakṣhmaṇasena was still in his mother's womb, his mother was hung legs upwards,⁴ in order to prevent the birth of the child at an inauspicious moment. When the proper time arrived, she was released and gave birth to the child, the future Lakṣmaṇiyā, but the mother did not survive. Such treatment of a lady has not been heard of in the country during the last two thousand years. Moreover, had the mother been treated in the way which Minhāj relates, the survival of the child would have been a physical impossibility. The source from which such stories originated cannot have much value with regard to veracity. The fanatic superstition and zeal of the raiders stood in their way of getting at a clear understanding of the circumstances which presented themselves at the time, and rendered them quite incapable of making a sympathetic study of the manners and customs of the nation, which, owing to internal dissensions fell an easy prey to the invading hordes of foreign barbarians, who were neither more brave nor more civilised. The rude vandals of the frontier border-lands, whose civilisation was all to come, pulled down a superb edifice of refinement and culture by one sweep of their fanaticism. They had neither the time nor the capacity to understand the real cause of their success. They were blinded by their magnificent achievements in a country, which to them appeared to be the promised land—the land flowing with milk and honey. The treatment, which, according to Minhāj, was doled out to the mother of Lakṣhmaṇasena is unprecedented in India, and is only possible in a country where women are being regarded as mere commodities of trade and subject to the *wagf* of morables.

The next source of information, which the learned Professor makes much of, is the *Laghubhārata*. The traditions, as recorded in this work, might have been the prevailing traditions of the time, but with regard to their genuineness from an historical point of view, they should find acceptance with a heavy amount of discount. The work itself is a composition of the sixteenth century. The distance of time sufficiently warrants scepticism with regard to the historical nature of the traditions, on which Prof. Bhaṭṭasāli builds up his arguments.

The demise of the queen, the reported death of Vallāla, and the necessary installation of the new-born infant, Lakṣhmaṇa, are events too sad to be commemorated by the institution of a new era. Such commemoration is without any parallel in the world's history. The Nirvāṇa era, which is supposed to commemorate the death of Buddha, has a different interpretation with the pessimistic Buddhist. To him it typifies the total cessation of pains, an utter dissolution of the entity, "a consummation devoutly to be wished". In the case of the Hijira, we might say that Muhammad's flight from Mecca to al-Madinah was the beginning of his success, and, hence, he had good reason to regard the date of his flight as auspicious and to perpetuate it in the memories of men by the inauguration of a new era.

² Minhāj : *Tabaqāt-i-Nasirī* : Raverty's Trans., p. 322.

⁴ *Ibid*, Raverty's Trans., p. 555.

³ *Ibid*, Raverty's Trans., p. 532.

Mr. Banerji is perfectly right in rejecting the date of the first of the four Bodhi-Gayâ inscriptions of Aśokachalladeva. When Hienien Tsang visited India, there was a great divergence of opinions about the date of the Mahāparinirvāṇa. The Northern and the Southern Schools did not agree. The mention of the Mahāyāna and the Hravajra leads us to believe that the date might have been in accordance with the reckoning of the Northern School; but the mention of the "*Singhal-sthavira*" in the inscription IV raises doubts, and the definiteness which Prof. Bhaṭṭasāli asserts is rendered cloudy. No chronologist in India, or anywhere else, during "the interval of the seven centuries," took up the question and tried to harmonise the widely divergent opinions of the north and the south and to fix even a conventional date for the starting point of the Nirvāṇa era. Even now the same difference in opinions exists, and we fail to see any reason in the dogmatic assertion of the learned Professor. A calculation based upon so unsure a ground cannot stand the test of critical study. The assurance of the Buddhist friends of Prof. Bhaṭṭasāli cannot obviate the difficulties that beset its acceptance as a datum for logical argument. He might convince himself of the existing difference in opinions by consulting Cunningham's *Book of Indian Eras*.

The next question that has been raised by Prof. Bhaṭṭasāli centres round the expression *attarājya*. The Sanskrit expression, as it is, directs our attention to the *rājya* itself, if not to its initial year. It is not equivalent to *rājya atite sati*, which would refer to the end of a regnal period. The *pūrvanipāta* of *atite* is what we think renders the explanation of Prof. Kielhorn more acceptable than the one proposed by Prof. Bhaṭṭasāli, and we understand it to mean that "although the years were still counted from the commencement of the reign of Lakṣmanasena, that reign itself was a thing of the past."² Prof. Kielhorn tried to harmonise the evidences of the Muhammadan historians and those yielded by epigraphical studies and held that the so-called conquest of Bengal took place in the year 80 of Lakṣmanasena era, although the reign itself was a thing of the past.

The question of a distinct era counted from the end of Lakṣmanasena's reign is altogether a new one. If the king had been a very popular one, the end of his reign with the loss of his kingdom brought about by a foreign invasion, would be regarded rather as a calamity and would not be commemorated by the institution of a new era. The word that occurs in the old document referred to by Prof. Bhaṭṭasāli has not been correctly quoted. The word is *parganditi* and not *parganditi*. We are at a loss to understand how he could misquote it. The reference is to p. 45 (and not p. 511) of Babu Jogindra Nāth Gupta's *History of Vikrampur* (in Bengali). Before making any remark, we would draw the attention of the learned Professor to the language of the document. It is full of outlandish words and expressions, and was made out at the time when the languages of the courts of law in Bengal were Persian and Arabic. The word *parganditi* has perhaps no relationship with *atite*. We should not like to risk any suggestion or improvise any correction as the learned Professor has done.

In the Madhānagar copper plate grant,³ it has been said that Lakṣmanasena joined in an expedition against the Kālīngas when he was still a Kumāra (*Kaumāra kēti*). This must have been when he was at least 20 years of age. Then, following up the datum of the grant, he must have been at least 22 years of age when he was called to the throne. If we accept the conclusions of Prof. Bhaṭṭasāli, king Lakṣmanasena should have attained $22 + 80 = 102$ years when Muhammad the son of Bakhtiyār led his Turks into Nadiya. Prof. Kielhorn, as it appears from his *Synchronistic List of Northern India*,⁴ had afterwards abandoned his theory of the conquest of Bengal, an interpretation which he proposed by bringing together the evidences of the Muhammadan historians and those obtained by the study of inscriptions of the period.

Mr. D. B. Bhaṇḍārkar has pointed out that Mr. Nagendra Nāth Vasu has already set forth much of the matter which Prof. Bhaṭṭasāli dilates upon in his paper; and, by the way, it might be said that the conclusions of Mr. Vasu on the date of composition of *Dānasāgara* do not seem to us very

² *Ante*, XIX, p. 7, and p. 2, note 3.

³ *Jour. As. Soc. Beng.* for 1910.

⁴ *J. A.*, VIII.

well warranted. When we find that *ślokas* indicate the date of the composition in a manuscript, copies only of which are available, and also find that in some of them such *ślokas* are absent, the possibility of their being interpolated in the copies in which they are found generally comes to our mind, and such evidences should not be taken as conclusive enough to serve as data for further argumentation. With regard to the *Adbhūtasāgara*, we may point out a similar variation in the existing copies of the work. The copy of the Asiatic Society of Bengal does not contain many *ślokas* which are reported to be present in the manuscript described by Sir Rāmkrishṇa Gopāl Bhaṇḍārkar.

In conclusion, we are inclined to believe that Lakṣmāṇasena was dead long before the raids described by Minhāj took place, and that A. D. 1119 or Saka 1041 is the approximate date of the death of Vallāṣena and the installation of Lakṣmāṇasena. A new inscription lately discovered at Dacca by Mr. R. D. Banerji, which he has incorporated into his paper on Lakṣmāṇasena read before the Asiatic Society, will conclusively prove the validity of our reasoning and hasten to a definite decision a yet undecided point in the history of Bengal.

INDIAN INSCRIPTIONS AND THE ANTIQUITY OF INDIAN ARTIFICIAL POETRY.

BY G. BUHLER.

[Translated by Prof. V. S. Ghate, M.A.: Poona.]

(Continued from p. 179.)

IV. The Gīrnār inscription of the reign of Mahākṣhatrapa Rudradāman.

The results obtained from the examination of Harisheṣa's *prāśasti*, point to the provisional supposition that the *Kāvya* literature was in bloom, at least in the whole of the fourth century, and the works composed at that time, do not essentially differ from the samples of *Vaidarbhī rīti* preserved for us. Beyond this, we cannot go with the help of the Gupta inscriptions known to us up to this time. It, therefore, becomes necessary to consider the only great Sanskrit inscription, which can be, with certainty, placed in a considerably earlier age. It is the so-called Rudradāman inscription on the well-known rock on the way from Junāgaḍh-Girinagara to the present Gīrnār, a holy mountain known as Ujjayāt or Ujjayanta in earlier times. This inscription would be more properly called 'the *prāśasti* of the restoration of the Sudarāṇa lake, during the reign of Mahākṣhatrapa Rudradāman.' Its age is pretty certainly fixed, in the first place, by the names of the king and the Kṣhatrapa Chashtana, who is spoken of as Rudradāman's grandfather, and in the second place, by the date of the storm which shattered down the embankment of the Sudarāṇa lake. Chashtana is no doubt rightly identified with the king Tisastanes, who, as Ptolemæus informs us, ruled in Osene or Ujjayini. The Greek name quite corresponds with the Indian name, not merely on the ground of other similar cases which occur and in which the Indian palatal sounds are represented by the Greek dentals with following *ia*,⁴³ but because even the Indian pronunciation of the palatals varies between *tja* and *tya* as well as between *dja* and *dya*, and we frequently hear of *tya* and *dya* as combinations with the sibilants.⁴⁴ The possibility that Ptolemæus could have meant any other Chashtana than that of our inscription must be regarded as out of question, because the name occurs in no other dynasty, and even amongst the western Kṣhatrapas, it is only the grandfather of Rudradāman, who is so named. Thus, if we accept this identification of names and persons, it follows that Chashtana must have reigned before 150 A.D. and further that his grandson Rudradāman can, in no case, be placed later than in the first half of the third century, probably even earlier. The settling of the date becomes even more accurate through the fact that the fixing of the beginning of the Gupta era in the year 318 or 319 makes entirely probable the view already maintained by Dr. Bhagvānlāl, Dr. Bhāṭ Dāṣī, Dr. Bhaṇḍārkar and others, according to which the date of the inscription in question, i.e., the year 72, refers to the

⁴³ Cf. Tisoura-Chitor and Diamoune-Jamnapī.

⁴⁴ See the remarks on the reverse of the table of letters in my Guide to the elementary course of Sanskrit. I shall, in another place, furnish proof that the modern pronunciation of the Indian palatals is very old.

Saka era and thus corresponds to our year 150 or 151. This date is the first of a long series, which continues down to the year 310. Inscriptions⁴⁷ provide the following dates:—103 for Rudradāman's son Rudrasīmha, 127 for Rudrasīmha's son Rudrasena, and 252 for Svāmī Rudrasena; while on the numerous coins are frequently represented almost all the decades between 100 and 310. During this long period, the successors of Chashtana appear to have maintained their sovereignty over western India, except for a short interruption, and to have been in possession of Mālwa as well as the neighbouring provinces of Gujarāt and Kāthiāwār. There is nothing in the inscriptions before us, that would admit the conclusion that their capital was ever removed from Ujjain further westwards. On the other hand, our inscription shows quite clearly that the residence of the prince lay outside of Gujarāt and Kāthiāwār, as his officer Suviśākha, according to l. 18, was governor of Ānarta⁴⁸ and Surāshṭra. The successors of the Kshatrapas, in the sovereignty over Mālwa and the whole of western India, were the Guptas, whose conquest of the former province falls before or in the Gupta year 82, i.e., 400/1 or 401/2 A.D., as is shown by Mr. Fleet's No 3. Accordingly, it is to be expected that the last date of the Kshatrapas coming from Chashtana's race can not lie far removed from the Gupta year 82. And this is actually the case, if the year 310 on the Kshatrapa coins is interpreted as a year of the Saka era. Then it corresponds to the year 388 or 389 A.D., and is removed only by eleven years from the year in which the conquest of Mālwa can have taken place at the latest. Though this very consideration is enough to commend the identification of the era used by the Kshatrapas with that of the Saka kings, there are still many other reasons of not less importance, which would confirm the same. The titles of Chashtana are *rājan*, *Kshatrapa* or *Mahākshatrapa*, and *sāmān*. The word *Kshatrapa* is, no doubt, as has been long ago asserted, an adaptation of the Persian *Kshatrapa* 'satrap.' Because, although we can look upon the word as a pure Sanskrit word and translate it by the protector of Kshatriyas, still such a title is entirely unknown to Sanskrit literature. *Kshatrapa* and its Prakrit substitute *Chhatrapa* or *Khatrapa* occur in the first place, in the coins and inscriptions of barbarous kings and their governors, who ruled over the north-western India.⁴⁹ Even Chashtana as well as his father, the *Mahākshatrapa* Ysamotika,⁵⁰ were foreigners, and there is no reason why we should believe that the title was fixed upon them in a different sense. If Chashtana bears the title of *rājan* also, well, it might have been conferred upon him only as a mark of distinction for some special service. In a similar manner, the vassals named *sāmān* or *mahāsāmān*, as well as other high dignitaries received the title *mahārāja*⁵¹ in the fifth, sixth and later centuries. Chashtana's suzerain can have been just one of the Indo-Scythian kings whose might had overshadowed the whole of the north-western and western India, towards the close of the first century and in the second century, as is shown by the inscriptions and the accounts of the Greeks; and a still clearer proof of his connection with the north-west is provided by his coins, wherein his name is given in the Bactro-Pali or rather Kharoshthi⁵² alphabet which is written from right to left. It is very probable that the descendants and the immediate successors of Chashtana bore the same relation to the rulers of the Indo-Scythian kingdom as long as it was in existence. As for Rudradāman, in particular, I see a clear confession of his dependence in the expression (l. 15) *svayam-adhigata-Mahākshatrapa-sabdēna*,

⁴⁷ The three dated inscriptions are, that on the rock of Gundā, *ante*, Vol. X., p. 157, that on the pillar of Jaḍan, *Jour. As. Br. Roy. As. Soc.*, Vol. VIII., p. 234 ff. (in which, according to an impression of Mr. Dhruva's, the date is to be read as [tri]yuttarasāte 100[+3]), and one unpublished inscription on a pillar in Okhāmpdal, of which I possess a sketch and a photograph. The view, that the era used by the western Kshatrapas in the Saka era, is found at first in the *Jour. As. Br. Roy. As. Soc.*, Vol. VIII. p. 243 ff., and is further developed in Dr. Bhāṇḍārkar's *Early History of the Deccan*, p. 19 ff. See also *Jour. Roy. As. Soc.*, N. S. 1890, p. 639 ff. I have opposed the same in *Arch. Surv. West. India*, Vol. V., p. 73, while I believed that the beginning of the Gupta era fell in the second century p. Chr.

⁴⁸ Ānarta includes Northern Kāthiāwār and northern Gujarāt up to the Mahi.

⁴⁹ Notice specially the copper-plate on which the Chhatrapa Liaka Kusula appears by the side of the king Moga. In this case it is quite clear that Liaka was the Satrap of Moga.

⁵⁰ See *Jour. As. Br. Roy. As. Soc.*, Vol. VIII., p. 3. A very nicely preserved coin on which this name is very clearly readable, was shown to me, some years ago, by Dr. Burgess. Dr. Bhagvānlāl reads the name as Ghamotika.

⁵¹ See Fleet, *Corpus inscr. Ind.*, Vol. III., p. 15 note.

⁵² See Professor Terrien de la Couperie *Babylonian Record*, Vol. I., p. 60. Dr. Bhagvānlāl (*ante*, VIII. p. 236) has rightly recognized the historical significance of the use of this alphabet on Chashtana's coins.

'by (Rudradāman) who had himself won the title *Mahākshatrapa*'. According to my view,⁵³ the author means to say that Rudradāman did not inherit the title *Mahākshatrapa* from his father or grandfather (although these possessed it), but that he had to win it by means of his special services and that he received it from his suzerain. To this interpretation I am specially led by the meaning of the very analogous phrase, *samadhigatapañchamahāśabda*, 'he who has won the five *mahāśabdas* (i.e., either five great titles, or the right to have the royal music band to play)', which is used in a very large number of inscriptions, of *Sāmantas* or vassal-chiefs. Moreover, even supposing Rudradāman had made himself independent and had himself taken a title, it appears to me improbable that he should have chosen the title *Mahākshatrapa*. In that case, he would have certainly named himself *mahārāja*, *rājārāja*, *rājātirāja*, or *rājādhirāja*, as the independent kings of the first and second centuries always did. Thus Chashāna, in all probability was a dependent of some Indo-Scythian king, and it is, therefore, not possible that he should have founded a new era. He must have used the era of his suzerain, and the same must be supposed in connection with his grandson. If then, as I believe it must be assumed, this latter also bore the same relation to the Indo-Scythians, there can be no doubt regarding the interpretation of the date of the Girnār *prāsti*.

According to this calculation, then, the destruction of the Sudarāna lake by the storm mentioned in our inscription falls in the year 150 or 151 A.D. The inscription itself, however, must have been written yet later, sometime towards the end of the first century of the Saka era, i.e., between 160 and 170 A.D., because it is said in lines 17-18 that the restoration of the dam was attended with great difficulties. Thus it is most conclusively proved that even during the second half of the second century, there was in existence a *Kārya* literature. Although there is wanting a colophon which might have given us the exact character of the composition, still it can be easily seen that it contains a *gadyaśāh kāryam* as such. Its style is similar to that of the prose part of Harishēṇa's *kārya* in many respects and besides the use of *ślokaśāstras*, there is an obvious effort on the part of the poet, to satisfy all the requirements prescribed for prose-composition by poetics. At the same time, however, it can not be denied that its worth is very considerably less than that of the *Allaḍbād prāsti*, and that its author did not by far possess the imagination and talent of Harishēṇa. The language itself which is, indeed, generally speaking, flowing and good shows several deviations from the usage of classical poets and even presents some actual mistakes. Thus in *no-ā garbhāt* (l. 9) there is a wrong *saṃdhi* made. Among other offences against the rules of orthography prescribed by grammar are the frequent omission of *ch* before *chh* and the use of the *anuvāra* for *ā* and *u*, in the body of words, as well as for *m* at the end,⁵⁴ though both these, it is true, are sanctioned by usage. Further, there is seen the influence of the Prakrit in the word *śiśaduttarāṇi* (l. 7) which stands for *śiśaduttarāṇi*. Even the form *vināśat* used only on the analogy of *trihāśat* etc., is not classical, but belongs to the language of the epics and the *Purāṇas* as is shown by the quotations in the Petersburg Lexicon. If the long syllables in *nirvāḍjam arajityāśaṣṭiya* which are against rule, are not mere mistakes in writing of the scribe or of the stone-engraver,—although in the case of *arajena* for *arāṇa*, no other assumption is possible,—then they must be regarded as only instances of the Prakrit influence. Because, the Prakrit dialects frequently represent *śā* by *nā* or *śā*, and the Gujarātī *jī* 'conquest', and *jīlavuṣ* 'to conquer' agree with the long syllable in *arajitya*. So also, the instrumental *patinā* in l. 11 is formed against Pāṇini's rules, though it is in agreement with the usage of the Vedic and epic language. There is also a mistake of syntax in *anyātra saṅgrāmeshu* (l. 10), 'except in battles', which ought to be *anyātra saṅgrāmeṣṭhyah*. So also the form *pratyākhyātārāmbhaṇ* (l. 17) would be a worse mistake of syntax, as I believe in all probability it can not be regarded as an error in writing for *pratyākhyātārāmbhe*.

⁵³ Dr. Bhagvānlāl thinks otherwise. According to him the idea is that Rudradāman freed himself from the yoke of a suzerain.

⁵⁴ The frequent avoidance of a *saṃdhi* is not incorrect, because, according to a well-known *kārikā*, the *saṃdhi* depends upon *vināśāt*, i.e., it is to be made only if the words actually belong together. In the prose-inscriptions, the *saṃdhi* is usually not made where we would have a comma or a semi-colon.

Last of all, the phrase पञ्जन्वेन एकार्णवमूलावानिव प्रयिष्यां कुलावान् (l. 5) is a hard nut to crack. No full-fledged classical poet has taken the liberty in this way. On the other hand, a similar phrase is more frequently met with in the epics.⁵⁵ The many points of similarity with the epics, which the language of the Gīrnār *prāśasti* exhibits, could have led to the supposition that the author had cultivated himself exclusively by the reading of epics and that a *kāvya* proper was not at all known to him. But such a supposition is contradicted, first of all, by the general impression, which his composition makes. Whoever reads it attentively would feel that in the matter of the development of the style, it shows a stage considerably in advance of the epics. Further the supposition is contradicted by several particulars leading to a similar conclusion, especially the important passage in l. 14, wherein the author enumerates the attributes of a good composition, prevalent in his time.

As for the points of affinity with the *kāvya* style proper, which this *prāśasti* exhibits, it is to be first of all noticed that the author knew very well the canons laid down by Daṇḍin as common to all schools, according to which *vijas* or *samāsa-śāśyastat*, the frequency and length of compounds, is the principal feature of a prose composition. In the *prāśasti* also, the compounds occur more frequently than single words, and the compounds themselves often exhibit a conspicuous length. Thus in the very first line, there is a broken compound which consists of nine words with twenty-three letters. Such compounds and others extending over between ten and twenty letters are numerous. Once in the description of the king (l. 11) the author goes to the extreme of having a compound word which comprises seventeen words with forty letters. As compared with Harisheṇa's performance, that of the Gujarātī author is by all means a modest one, though the latter far surpasses what the epic poets have been capable of doing or have regarded as permissible. As with Harisheṇa, a rhythmical arrangement of letters in the longer compounds is often noticeable, as for instance, in ll. 6 and 9 ff. Hand in hand with the length and number of compounds, goes the length of the sentences. The *prāśasti* apparently contains only five sentences with forty-nine *grantha*, of which the fourth sentence alone consists of more than twenty-three *grantha*. Harisheṇa surpasses the Gujarātī writer, in this point also, and this is an important point, because his whole *kāvya*, though longer in extent, contains only one sentence. Of the *Siddhāntikāras*, we have only the *Anuprāsas*, and the repetitions of parts of words, more seldom of whole words, as well as of single letters producing a similar sound, are very frequently met with. The specially remarkable instances are:—

सुहृन्निर्वस्तान्मो हृदयान्मो (l. 4), सृष्टवृष्टिना (l. 5), °प्रभृतीनां नरीनां (l. 6), °प्रहरणवितरण° (l. 10), °प्रकृततीनां निपाशतीनां (l. 11), °कानविषयानां विषयानां (ibid.), °विधेयानां बोधेयानां (l. 12), °हस्तोष्णवाजितोषित° (l. 13), °न्याययानां विद्यानां (ibid.), पारणधारण° (ibid.), शानमानाशमान° (ibid.), °गद्यपद्य° (l. 14), प्रमाणमानोन्मानो° (ibid.), °नाम्ना °शम्ना °हृदयान्मा (l. 15), पौरजानपदं जनं (l. 16), पौरजानपदजन° (l. 18), भाट्यैषाहाट्यैष (l. 19).

The *Varṇānuprāsas*, which do not strike us at first sight, but which are, nevertheless, not less characteristic, are specially numerous in गिरिशिखरतटतटाङ्गलकोपतल्पहारहारपोष्णविवर्ण-सिना (l. 6), where the repetitions of consonants and vowels are linked together very skilfully. Thus it is quite evident that the author took great troubles with these word-ornaments and attached great importance to them. His use of these far surpasses what the epic literature can present, and stands pretty on a level with what we have in Harisheṇa. The word वयार्पहस्तोष्णवाजितोषितवर्णानुरागेण is just exactly in the *Kāvya* style, for the compound *arjitorṣita* is very much favourite with the later court-poets. As for the *Arthāntarikāras*, our author uses them but very rarely. Thus there are only two *Upamās* to be noted. In l. 1-2, it is said that the lake or rather the embankment thereof is *parvata-pratisparddhi*, 'resembling a spur of a mountain'; and in l. 8, the dried-up lake is spoken of as *maru-dhanva-kalpam*, 'resembling a sandy desert.' In the former instance, the expression *pratisparddhi* is quite characteristic of the *Kāvya* style. We have an *Utprekāḥ* in the already mentioned passage, °पञ्जन्वे-

⁵⁵ Cf. for instance, *Nalā* XII, 28, केतुभूतमिवोत्पितम् and also the quotations under भृत् in the Petersburg Lexicon.

एकान्वयभूतायाविद्वृष्टिर्ना कृतावान् and a faint attempt at *Stesha* in l. 8, where it is said that the lake had become *atibhriṣam durdda[rīanam]*. For the rest, the author neglects the numerous opportunities which are offered to him, for instance, in the description of Rudradāman, of showing his skill in bringing out similarities. He relies more on the effect of a representation of facts marked with strong outlines, than on the conglomeration of more or less conventional figures of sense. It must be conceded that he succeeds quite well in individual descriptions, though he fails in the fineness of execution and the elaboration of details, which are found to be present in Harishena. The passage in l. 8-7 describing the destruction of the lake, reads best notwithstanding many important lacunae. Freely rendered, the passage would read thus:—

'In the year seventy-two, 72, (in the reign)⁵² of the king and great Satrap Rudradāman whose name is uttered by the worthy (praying for parity)—the son [of the king and great Satrap, Lord Jayadāman] the grandson of the king and great Satrap, Lord Chashtana—the mention of whose name brings parity—on the [fifth or fifteenth] day of the dark half of the month Mārgaśīrṣa a storm with great streaming showers, as it were, reduced the earth to one single ocean; the terribly augmented force of the Suvarnasikātā, the Palāśini and other rivers of the mountain Ūrjayat broke through the dam although proper remedial measures were taken, the water agitated by the whirlwind which (raged) with fearful violence as if at the end of the world-age, and which shattered down mountain-peaks, trees, rocks, terraces, temple-turrets, gates, abodes and triumphal columns, the water scattered about and tore to pieces [the and] this (lake) [crammed] with stones, trees, bushes and circles of creepers that were thrown down, was broken up, down to the bottom of the stream.'

The small number of the *Arthśāsthras* is richly counterbalanced by the fourth word in l. 14, which praises in all probability Rudradāman's skill in poesy, and contains, without question, the views of the author regarding the requirements of a good composition. Unfortunately, the word is mutilated. After स्फुटलघुमधुरविचकान्तशृङ्गसमबोधासलंकृतमद्यपय, eight letters have been obliterated, followed by न. The last letter shows that the expression ended with the instrumental of an a-stem. Immediately after मद्यपय, only the word काव्य can come, as it is absolutely necessary to complete the two expressions मद्य and पय. The remaining six letters should then have been a phrase like विधानप्रवीणे, रचनकुशलै, रचनविरते or like (आ) स्वायनविरते. Now if we consider what is said of Rudradāman in l. 13, viz., that he had acquired great renown by the complete study, the preservation, the thorough understanding, and the skill in the use, of the great lore, such as grammar, politics, music and logic, we must go in for one of the first series of expressions proposed. Because, the practising of classical poetry is the natural complement of the cultivation of the abstruse śāstras in the case of the Paṇḍit, and both these have been very frequently extolled as the qualifications of Indian kings. These considerations make it quite probable that the compound in question, when completed should stand as स्फुटलघुमधुरविचकान्तशृङ्गसमबोधासलंकृतमद्यपय [काव्यविधानप्रवीणे] न. Now, if we take the author on his word, and suppose that he is stating only facts, nothing more nor less, then it would follow that Rudradāman must have devoted himself to the cultivation of court poetry like Saundragupta and Harshavardhana. Then the passage in question would further prove that the *Kāvya* literature, in the second century, had been developed to such an extent, that even the grandson of a foreign Satrap like Chashtana could not escape its influence. On the other hand, if it is thought more advisable to understand the expressions of praise in the *praiśasti*, with a qualification, and to think that these expressions regardless of actual facts, only concern themselves with representing Rudradāman as an ideal Indian prince—as the poet's fancy was pleased to depict, even then we would be justified in drawing this conclusion at least, that during the second century it was the custom at Indian courts to occupy oneself

⁵² The words printed within small brackets are necessary to complete the sense; while those in rectangular brackets are renderings of the broken words as restored by me.

with *kāvya*. Even this result in itself is of no little significance inasmuch as it proves that the invasions of the Scythians and other foreign races had extinguished the national art as little as the sciences. Further, as regards the characteristics which the *prāśasti* prescribes for *gadya-padya* 'the compositions in prose and metrical form', it is to be noted, that they essentially agree with those which are given by Daṇḍin for the *Vaidarbhi rīti*, in accordance with an old tradition.⁵⁷ In *Kāvya-darśa*, I. 41-42, we have :—

श्रेयः प्रसादः समता माधुर्यं सुकुमारता ।
अर्थव्यक्तिरुत्तरस्वभावः कान्तितमाधयः ॥ ४१ ॥
इति वैदर्भीमार्गस्य श्राना दशगुणाः स्मृताः ।

Of these ten fundamental attributes of the Vaidarbhi style, the *prāśasti* names three, viz., *mādhurya*, *kānti* and *uddrāta*, and there is no reason why the *mādhura* and *kānta* of the inscription should be interpreted otherwise than as *rasavat* 'full of sentiment,' and *sarvajagatkānta* 'pleasing to the whole world' or 'lovely', respectively. On the other hand, the word *uddrā* 'elevated, grand' can scarcely have the meaning which Daṇḍin attributes to it, in *Kāvya-darśa*, I. 76.⁵⁸ The preceding *śabdā-samaya* specially enters into compound with *uddrā* at any rate, and the expression *śābdasamayoddrā* can not but be translated as 'grand through the conventional (with poets) use of words.'⁵⁹ Accordingly, our author, following those who are referred to by Daṇḍin, as *kechit* (*Kāvy.* I. 79), means by *uddrā*, that language in which are used proverbial words and attributes commended by poets, e.g., *kriḍāraḥ*, *līlāmbujā*, and similar words. A fourth characteristic mentioned by Daṇḍin, the *arthavyakti* 'clearness of meaning', can be easily recognized in the synonymous expression *sphuṭa* of the inscription. A fifth characteristic *ojas*, 'the force of expression' may probably be meant by the adjective *chitra* 'wonderful, exciting wonder.' In favour of this we can quote Bharata's definition (Chap. XVI):—

समासवद्विर्विधैर्विचित्रैश्च पदैर्द्युतम् ।
सातु[साधु]स्वरैरुत्तरेभ्यः संज्ञाः परिकीर्यन्ते ॥

Even in the epithet *laghu* which is wrongly rendered by translators as 'short', we may find hidden a reference to the sixth attribute of the Vaidarbhi style. *Laghu* here, no doubt, means 'beautiful, pleasing' and it very possibly stands for *prasāda* or *sukumārāṭh*, both of which are conducive to loveliness of composition. The last adjective *alamkṛita* leaves no doubt about the fact that the author of the *prāśasti* was acquainted with some theory of *Alamkāras*. In accordance with the proposed filling up of the lacunae and the explanations offered so far, the whole clause may be thus rendered:—

'(by the king and the great Satrap Rudradāman) who [was expert in the composition of] prose and metrical *kāvya*s, which are easily intelligible, charming, full of sentiment, capable of awakening wonder, lovely, noble with the conventional use of words, embellished (with the prescribed figures of speech).' Thus, whatever we may say about Rudradāman busying himself with poetry—a fact which is very probable, though of course we can not be absolutely sure about it—so much is certain that the author of our *prāśasti* lays on poets conditions very similar to those prescribed by Daṇḍin, that in the second century there must have been already in existence romances and other works in high prose as well as compositions in the Vaidarbhi style, which in no way differed from the samples of classical composition preserved to us, and that there also existed an *Alamkāra-śāstra*.

(To be continued.)

⁵⁷ The same are mentioned in Bharata's *Nāṭyaśāstra*, ch. XVI.—

श्रेयः प्रसादः समता समाधिर्माधुर्यमोक्षः पदौकुमार्यम् ।
अर्थस्य च व्यक्तिरुत्तरता च कान्तितमाधयस्य गुणा दशैते ॥

⁵⁸ उत्कर्षवाच्यः कश्चिदस्मिन्नुक्ते प्रतीयते ।

तदुदाहरणम् — — — — — ॥

⁵⁹ Dr. Bhagvānīlāl's translation, 'remarkable for grammatical correctness,' is not right for several reasons. 'Grammatical correctness' would be *śābdasaddharta*, and this quality does not make a composition *uddrā*. Besides, the king's ability to write correctly is mentioned in l. 13. I explain *śābdasamayoddrā* thus:—सर्वेषु शब्दविषये यः कवीनां समयः संकेत आचारो वा तेन उदाहरम् ॥

BRAHMAN IMMIGRATION INTO SOUTHERN INDIA.

BY A. GOVINDACHARYA SYAMIN, C.E., M.R.A.S., M.M.S.; MYSORE.

(Continued from Vol. XLI, p. 232.)

From this the conclusion is irresistible that there was indeed an ancient Brāhmaṇ leader of that name, who led a colony of Brāhmaṇs into the South. What the motives were that led to the emigration, we cannot definitely ascertain. The Purāṇic account is that the Vindhyas began to grow higher and higher and obstruct the path of the Sun, that the Devas sought the help of the sage and requested him to humble the pride of the mountain; that while accordingly the sage approached, the mountain, being its *śiṣya* or disciple, made its obeisance by prostrating itself before him, and then the sage crossed it and enjoined it to remain in that posture until he returned—which event has not yet taken place and therefore the mountain has remained low until to-day. Certainly there must be some meaning in this otherwise palpably impossible myth. Agastya himself was one of the R̥g-Vedic sages, but he was not included among the *Saptar̥ṣhis* or the seven sages, though he as the latter has become one of the *gotrakāras*, i.e., heads of the Brāhmaṇ families. The *R̥gveda* plainly describes him as trying to introduce a cult somewhat opposed to the cult of Indra, which was the prevalent one, and, therefore, as meeting with some opposition. Tamil tradition also points to this split as the real cause of his southward march with all his following. Probably it was not Agastya himself of the *R̥gveda* that made this southward march: a sort of quasi-eternity is given to the Vedic sages by the habit of calling the successive heads of the families or *gotras* by the names of the founders. Perhaps a descendant of the sage might have in later times led the southward march, when perhaps on account of the split in the camp, their continuance in the north had become intolerable. Perhaps, synchronous with that march, a depression of the Vindhyas took place due to seismic causes, which gave rise to the myths we have referred to. Geology owns the possibility of such subsidence and teaches that such subsidence may occur, due to undue volcanic activity, especially at the opposite side of the earth. A glance at the map shows us that about—20° lat.—70° long., the opposite point of the earth with respect to the Vindhyas, we have the Bolivian Andes with the powerful volcanoes of Sahama, Acancagua and so forth, and if in prehistoric times there was a terrible eruption of these volcanoes and this disturbance caused the subsidence of the mountain in India, we have precisely the state of things which the myth has obscurely represented as the prostration of the Vindhyas before Agastya. Some such extraordinary or apparently miraculous intervention is needed to make a dissenter like Agastya find favour with the Āryans of the north, who have not only included his name among the *gotrakāras*, but have also accepted his hymns in the *R̥gveda* and thereby practically adopted his cult. When this event took place, it is not possible to determine. Tamil literature refers it to a remote age, i.e., earlier than 5000 B. C. Considering the magnitude of the geologic changes with which the emigration was synchronous, there is indeed much to be said in favour of this tradition. The *Rāmāyaṇa* also makes the southward march of Agastya long anterior to the events it narrates. Even before Śrī-Rāma's time, Agastya had been dwelling in a hermitage to the south of the Vindhyas about two *yojanas* from Pāñchavāṭ, where he had made his temporary home; and he always seems to have acted as the pioneer in the southward march; for we find him go down further south at the time of the close of the Lankā war. The Tamils locate his *dārama* in Podiyam, a peak of the Tinnevely Ghats, from which the Tāmraparṇī takes its source; and he is still thought to be living there. Moreover, Rāvaṇa, Vālī, Sugrīva and other great epic heroes of the south are represented as children of Non-Āryan mothers by Āryan fathers. Perhaps before complete Āryanisation was effected, these hybrids, with the energy natural to the offspring of mixed union, and also with the savagism of barbarian nature, which is seen to follow such unions

as a natural consequence, began to trouble the Āryan settlers in the Daṇḍakā forest. For the *Rāmāyaṇa* says that for a long time before the advent of Rāma the troubles from the Rākshasas—meaning thereby the aborigines of the south, had ceased; but only very recently they had begun again under the leadership of Mārīcha, Subāhu, Khara, Rāvaṇa and others—all offspring of Non-Āryan mothers and Āryan fathers; Rāvaṇa is even represented as a Brāhmaṇa and Sāma-vedin—a descendant of Pulastya. Thus the first movement of the Brāhmaṇs towards the south seems to have been caused by a split in the faith, and the succeeding settlements were made afterwards by ascetics and lay-brothers, seeking solitude and calm for practising all the self-mortifications that they thought were necessary for gaining spiritual wealth. It was the combination of the two sets of circumstances that led to the slow Āryanisation of the south long before the rise of Buddhism, or the southward march of Jainism. Later on, after some advance was made in civilisation, emigration from other motives began also to take place; until at last about the 1st century A. D. we find that it was the South that became the seat of revived Brāhmanism. For the North had become almost Buddhistic, and powerful Scythian princes, like Kanishka, who had embraced Buddhism, were ruling in Kashmir, and the Sungas and the Āndhrabhṛityas in Magadha, and Persian Satraps like Rudradāman in Ujjain. Only Kanauj seems to have been still Hindu, but it was quite powerless then. The Kosalas had emigrated by that time to the south of the Vindhya and had formed the Chalukyas, who later on founded in the 6th century A. D. the Chalukyan kingdom in the Mahārāshṭra country, after defeating Indra of the Baṭṭa or Rāshṭrakūṭa family. Gotamiputra Śātakarṇi, one of the Āndhrabhṛityas, who ruled at Pratiṣṭhāna, is represented in the inscriptions, as having conferred on the Brāhmaṇs "the means of increasing their race and stemmed the progress of the confusion of castes," whatever that may mean. Perhaps it was from his time that the downfall of Buddhism may be dated. For after this time we find a revival of Sanskrit literature and re-institution of sacrifices; and the long disused Āśvamedha is referred to as again having been performed by Pulakeśin and others. Even the satraps of Ujjain, who had apparently been given a place in the Hindu social system, took the Brāhmaṇs under their wings: for Ushavadata, son-in-law of Nahapāna is represented as having fed thousands of Brāhmaṇs and, like Gotamiputra Śātakarṇi, given them "the means of increasing their race" (whatever that may mean). During the time of the Chalukyans, Brāhmanism seems to have completely regained its lost power; for it was then that the greatest Neo-Hindu teacher, Śrī-Śaṅkarācārya made his appearance. Before his time, *Pāramihādīsā* had been studied with great attention and famous writers like Prabhākaraśvāmi. Nandivāmi and others lived and wrote during the reigns of the early Chalukyans; and as we have said elsewhere, Telugu and Kannada began to differentiate themselves about this time, giving rise to two distinct languages.

In the meanwhile Mayūraśarman, the founder of the Kadamba kingdom in Konkan in the 6th century A. D., introduced a colony of Brāhmaṇs from Ahikshetra in Rohilkhand, and when it was found that during the reign of his son these showed a tendency to go back to their old home, the king seems to have set a mark upon them by obliging them to wear their top-knot in a special fashion. These formed the Nambudris (నామద్రు-our masters) of the West coast—a class of Brāhmaṇs, who differ from the Brāhmaṇs of the East coast and of the Āndhra, Kannaḍa, and Tamil country in many particulars. These Brāhmaṇs slowly spread towards the south along the west coast and now inhabit the whole of the maritime country west of the Ghats as far down south as Trivandrum. It was the influence of these Kadambas that led to the subsequent differentiation of Malayālam from Kannaḍa on the one hand and Tamil on the other. The Kūrgi and the Tulu from the links connecting it with the two elder numbers of the Dravidian group; but none of these importations altered the essential character of the first settlers in manners and customs: they have remained distinct. The earlier settlers had borrowed many of the manners of the Dravidians, among which may be named the institution of *tālī*-tying, the boring of the nose, the tying of the

idli and the presenting to the bride of the new *sari* by the husband's party prior to marriage called *sams*, are all Dravidian customs, symbolic of slavery or purchase and do not find any sanction in the sacerdotal formulae of the *grîhya* ritual in use among the Āryans. In all these respects the Nambudris seem to differ from the other southern Brāhmanas. So much was the South favoured by the colonization of the Brāhmanas before the 6th century that the *Pūrāṇas*, that seem chiefly compiled during the early Chalukyan kings, went to the length of prophesying that in future the only refuge of Brāhmanism would be the extreme south of the Peninsula, in the basin of the Tāmraparṇī. For they shrewdly found out how in the North, subjected to foreign inroads and irruptions from without, there was not much chance of their keeping either their blood or their religion pure, and they with one voice declared :—

कलौ खलु भविष्यन्ति नारायणपरायणाः ।

कश्चिद्विन्महाराज इति देषु च भूरिचः ॥

तात्रपर्वी नदी यत्र कुतमाला पयस्विनी ।

कावेरी च महामाया

etc. etc. *Bhāg.*

Nor were their apprehensions long allowed to remain unconfirmed; the worst sort of disaster soon overtook them, when, early in the 8th century A. D. (711 A. D.), the relentless iconoclastic Muhammadan storm burst upon the land. It was Gujarāt, that first suffered from the outburst. The Bhāgavata *Sampradāyins*—worshippers of Kṛishṇa, who formed the bulk of the population of Gujarāt, Muttira and the north-west generally, soon felt the pressure of the times and the wisest among them migrated to the south and peopled the Telugu, Kannada and Tamil kingdoms. In the 9th and the 10th centuries their numbers increased when the Muhammadan incursions became more frequent and more threatening. It was these that brought into the South the Renaissance literature of the North, the product of more recent times, made during the times of king Bhoja of Dhārā and the Guptas of Ujjain and Pāṭaliputra and Harshavardhana of Kanauj.

The earlier emigrants had brought but the *Mīmāṃsā*, the Epics and the *Sūtras*. It is these latter that brought Logic, Grammar and *Belles-lettres* in general, and gave an impetus to learning in the South. The 10th and the 11th centuries formed the Augustan period of Dravidian literature, alike in the Telugu, Tamil and Kannaḍa lands. The chief impetus for this magnificent activity was given by the new-coming Āryan settlers. So much did Rāja-rāja, the powerful Choja king at Kāñchi, recognize the value of these new comers that he defended them against the attacks of his aunt Kunda-Arvai, who remonstrated with him for showing favour to the culture of the North in preference to his own Tamil. The Srīvaishṇava revival in the 11th century A. D. in the South was only an episode in the literary culture that came with this latest emigration. Srī-Rāmānuja himself was directly related to Saint Ālavandār, grandson of Nāthamuni. In all likelihood Nāthamuni's father or grandfather was one of the pioneers of these latest settlers. If we examine the account given of the way in which these behaved towards each other, though settled in far off places like Kāñchi, Srīrangam, Madura and so forth, we are bound to conclude that they belonged to a closely-knit sept, and that they could be easily marked off from the rest of the Brāhmanas population among whom they had settled; the real name of the Saint Ālavandār, i. e., the name Yamunai-thuraivar (the sage of the Jumna) itself tells us how new these settlers must have been in their new homes at the time of the sage. Even to this day these are distinguished from the other Brāhmanas of the South in several respects and go generally by the name of Vaḍamaṣ, meaning North-country men. It was chiefly from this community that the bulk of the Srīvaishṇava conversions were made. Even in the Kannaḍa and Telugu country, it is the Bhāgavata *Sampradāyins* that easily passed into the Srīvaishṇava or the Mādhva fold. One distinguishing feature of these *Sampradāyins* is their partiality for Viṣṇu in his incarnation of Kṛishṇa. The *Bhāgavata-Pūrāṇa*, which seems to have been compiled by one of their number

develops this point of view of the community. *Sri-Bhāgavata* is prized alike by the Śrīvaiṣṇavas, the Mādhvas and the *Smārta* Bhāgavata *Sampradāyins* and Vāḍamaṣa. That these latter form the latest addition to the Brāhmaṇ population in the extreme south of the Peninsula is borne out also by a very curious custom. All the *Smārta* Drāviḍa Brāhmaṇ women, together with a few of the left-hand section of the Sādras, tie their *sāris* in a peculiar fashion. The upper end of the *sāri* is brought under the left shoulder over the right arm round the back and thrown over the left shoulder. This is precisely the manner of the costume of Greek ladies after 450 B. C. known as the *himation*. It was also the old mode of dress of the Āryan Brāhmaṇs before they entered India. It is the mode in use among the Persians and the Muhammaḍans. Once upon a time it was precisely the way in which the upper garment was worn by the Āryan males also. But there seems to have come a change in the mode of the male dress somewhere about the time when the Āryans settled in India. The *yajñopavīta* which the Brāhmaṇ wears is only a symbolic representation of his mode of dress. Much as the *yajñopavīta*, the sacred thread, is prized by the Brāhmaṇ of nowadays, there seems to be nothing in the ritual or the *mantras* that are used during the *upanayana* ceremony to uphold the great value set upon it. That it is nothing but a symbolic representation of the upper garment will be patent to every one who considers the origin of the mode of wearing it as given in the *Taittirīya-Brāhmaṇa*.

अजिनं वासी वा इक्षिपत् उपवीय इक्षिपं बाहुद्वारेऽवधत्ते सव्यमिति वक्षोपवीतं । एतदेव विपरीतं प्राचीनावीतं ॥ etc.

* Skin or cloth worn towards the right, round the body so as to go under the right shoulder and above the left is called वक्षोपवीत, the mode of dress in the service of gods; the opposite mode is called *prāchīnāvīta*.*

The words उपवीत and प्राचीनावीत indicate in what sense they might have been first used. प्राचीनावीत means the ancient mode of dressing; उपवीत is the recent mode of dressing, both derived from *eye* to weave. Later on the sacred thread with a bit of deer skin tied to it has come to symbolize this mode of dress. That *prāchīnāvīta* means the old mode of dress is borne out by the fact that funeral ceremonies are enjoined to be performed, the performer being dressed in that fashion, agreeably to the primitive notion that the sacrificer must dress himself like the god or the spirit he worships. Yamaivaśvata, being the old ancestor, who is worshipped in funeral ceremonies, the old mode of dressing is recommended. But in other cases the *upavīta*, the new mode. A metaphysical reason is assigned in the Veda itself for the change of dress, viz., that the Devas and the Asuras performed a sacrifice, the Devas dressing in the प्रसूति fashion, i.e., in the left to right fashion we have described and the Asuras in the other mode; and the Devas succeeded in gaining heaven while the Asuras were defeated and dispersed on all sides on account of the अपसूति fashion they had adopted. Probably this refers to the Āryan ancestors in their new colonies following nature, where all motion is seen to take place from left to right. For, finding such a mode of dress among the non-Āryan dwellers in the soil, they seem to have adopted it as a part of their scheme of following nature, which included the taking of such of the non-Āryan customs under their patronage as would help them in assimilating them easily and thereby strengthening their stock. While the male population easily adopted the change, the conservative female population perhaps remained averse to it for a long time. It was probably at this stage that the Dravidian Brāhmaṇs first migrated to the South. For while their ladies, i.e., those of the *Smārtas* of Tamil-land preserve this old habit, the ladies of the later settlers have adopted the new orthodox fashion completely. Here is an evidence of a very curious but convincing kind for the very early settlement of the Tamil land by Brāhmaṇs, long before perhaps the Telugu country itself was occupied by them. For we know that the Kargāṭaka and Telingana Brāhmaṇ ladies adopt the प्रसूति mode. The whole subject seems to be very interesting, and is deeply connected with the distinction of right hand and left hand

factions that used until recently to disturb the peace of Tamil villages, and of the Phanas in the Kannada districts.

At an early stage in the progress of this paper I asked the late Mr. Venkayya if he could throw some light on the solution of the problem I have taken up. I must, in justice to him, quote the letter he was good enough to send me from his camp at Vijayanagaram. He wrote:—"As I have not got all the books of reference, I am unable to give you a complete list of all inscriptions which contain grants of land to Brāhman. I suppose you know that the founder of the Kadamba dynasty, viz., Mayūrasarmā, was a Brāhman. His date is not definitely ascertained. But Dr. Fleet assigns the Kadambas to the 6th century A. D. As regards Pallava inscriptions, I would invite your attention to three copper plates, viz., Mayidavola plates of Sivaskandavarman (*Epigraphica Indica*), Kadamba plates of Jayavarman and the Hirahadagalli-plates of Sivaskandavarman. From the language and phraseology of these inscriptions, Dr. Hultsch has concluded that they cannot be very distant, in point of time, from the reign of Gotamiputra Śātakarṇi, who reigned about the middle of the 2nd century A. D. These and similar grants which Dr. Fleet has noticed show that the Brāhman had immigrated into Konjivaram long before A. D. 600. As regards Western India we have evidence to prove that there was a large colony of Brāhman at Nāsik already in the 2nd century A. D. while the Western Chālukya king, Kirtivarman I, is said to have made a grant to Brāhman in A. D. 578. No Chola or Pāṇḍya records prior to A. D. 600 are known. But the presence of Brāhman in Konjivaram during the 2nd or 3rd century may be adduced as evidence to show that they might have advanced farther south. This information is perhaps quite meagre for your purposes." Thus wrote Mr. Venkayya; yes, meagre enough, as I have said in the beginning of this paper if we have to depend solely on the evidence of inscriptions. But we have seen what other sources of information we have regarding such points. Sanskrit literature and Tamil literature might be used conjointly in fixing the chronology or other points of Indian History; for these two together will be seen to act like a *vernier* to definitely fix many an otherwise doubtful point.

It will thus be seen that the Āryan migration to the South was part of the scheme of Providence unfolded during a long interval of time by divine agencies apparently working with diverse, and oft times with cross, purposes. It was part of the large scheme whereby a moral and intellectual conquest of the whole of India was effected and the new-comer Āryan was blended with the native Dravidian, tending to produce a homogeneous population. Thus the method followed by the old Āryans was not to substitute the white man for the dark-skinned people—the method which is universally practised by the present-day civilizing agency with its cry of "White-man's burden" and "Imperialism". In those days Brāhman missionaries of a different kind pioneered indeed and overran unsettled tracts and devoted their energies to the conversion of the heathen. But these missionary settlements, except in very early times, never led to the spreading of the sword in their wake, as has often happened in these afterdays of European colonization. "It was by absorption rather than by annihilation that Brāhmanism triumphed", says Mr. Crooke, the Bengal civilian-historian of the old North-West provinces. "We hear", says he, "of none of the persecution, none of the iconoclasm which characterized the Musalman inroad. A fitting home was found in the Brāhman pantheon for the popular village deities, the gods of fear and death of the indigenous faith. Viṣṇu by his successive incarnation has been made the vehicle for conciliating the tribal gods or *totems* of tribes—now well within the fold of Hinduism". Thus the slow upheaval was going on and under the leadership of liberal teachers like Śaṅkara and Rāmānuja, the band was being removed from the eyes and hearts of the people, when it pleased God to throw open the country for the inroads of more powerful foreigners.

NOTE OF THE MANDASOR INSCRIPTION OF NARAVARMAN.

BY SIR DA. B. G. BHANDARKAR, K. C. I. E., &c.; POONA.

IN my article on the epoch of the Gupta era published in *Jour. Bomb. As. Soc.*, Vol. XVII., I have stated, (p. 92) "the date 493 occurring in that (Mandasor) inscription is referred to the event of the *Gaṇasthiti* of the Mālavas. What this event was exactly and when it took place we do not know." The impression of a new inscription recently discovered at Mandasor, prepared by Mr. D. B. Bhandarkar of the Archaeological department and shown to me by him, enables me to make a contribution towards an elucidation of the point. The verse giving the date is thus worded:—

श्रीमालवगणान्नते प्रशस्ते कृतसंज्ञिते ।
एकषष्ट्यधिके प्राप्ते सनासतचतुष्टये ॥

The translation is:—"the excellent quaternion of hundreds of years increased by sixty-one laid down authoritatively by the Mālava-gaṇa and named *Kṛita* having arrived." The word *āmnāta* means 'laid down,'—authoritatively of course,—since what is *āmnāta* is to be treated with respect and scrupulously followed. In *सनासतः सनासतः* the sense is: the *Samāmnāya* (*Nighaṇṭus* or thesauri) has been laid down (*Nirukta* I, 1). Similarly we are told in I, 20, that the later *Rishis* *samāmnādaishuh*, i. e., laid down authoritatively or composed this work, and the Vedas and the subordinate treatises. In *सनासतोपनिषद्* (*Vedāntasūtra* I, 4, 25) *āmnāta* has the same sense. In the present case therefore the sense is: the year 461 has arrived which has been laid down authoritatively by the *Gaṇa* of the Mālavas. This authoritative laying down cannot be predicated of this one year only but of all previous and subsequent years. If these years were laid down by the *Gaṇa*, they must either be so by their having composed a long list or directed that the years following a certain event should be ordinally numbered. Since a list must go on *ad infinitum*, i. e., be interminable, the former supposition cannot be accepted. The *gaṇa* of the Mālavas, therefore, must be supposed to have directed the use of an era beginning with a certain specific event. What must be the specific event? Light is thrown on this point by the following verse occurring in Yaśodharman's inscription at Mandasor:—

पञ्चस्र शतेषु शरसं यातेष्वेकान्ननवविसंहितेषु ।
मालवगणस्थितिप्रसात् कालज्ञानाय लिखितेषु ॥

"Five hundred and eighty-nine years written down for the purpose of knowing the time in consequence (ablative) of the moment [moving cause or impelling force (*vaśa*)] of the condition as a *gaṇa* or compact political body of the Mālavas having elapsed." That the word *vaśa* should be understood as the moment or impelling cause is confirmed by the manner in which the date is given in Bandhavarman's Mandasor inscription. The words are:—

मालवानां गणस्थित्या याते शतचतुष्टये ।
चिनवस्वधिकेऽवसानम्..... ॥

The sense is: "four hundred and ninety-three years having elapsed since the condition (i. e., formation) of the Mālavas as a *gaṇa*." *Gaṇasthityā* is to be taken as an ablative, the *visarga* having been dropped in consequence of the following soft consonant. This then was an era, the impelling cause of which was the *sthiti* of the Mālavas as a *gaṇa*, that is, it was the era of the formation of the Mālavas as a *gaṇa*, i. e., their forming a body corporate or body politic.

The Mālavas were originally a tribe which followed the occupation of fighting. They were soldiers by profession, and could enter any body's service as such, and did not form a *gaṇa* or an incorporated society for political and other purposes. Yājñavalkya, speaking of a person who takes away the wealth of a *gaṇa*, necessarily implies that a *gaṇa* is a corporate community with common property and common interest (II, 187). Occurring side by side in *ibid*, II, 192 with *śreṇī* a guild, and *veigama* or a body of merchants trading with foreign countries, *gaṇa* must mean a body corporate of persons following the same occupation such as that of fighting (*Vijād-veigama* and *Apardka*). I translate *gaṇasthiti* as existence or condition as a *gaṇa*. It should be taken as a *Karmadhāraya* or oppositional compound (गणस्थासौ स्थितिश्च i. e. गणात्मिका or गणरूपा स्थितिः). It cannot be taken as गणस्य स्थितिः. For in Bandhavarman's inscription the expression मालवानां गणस्थितिः would in that case involve what is called *Ekadeśi-anvaya* or the latter part would be a *sāpeksha* compound, i. e., *Mālavāndam* would have to be connected with *gaṇa*, i. e., the first or subordinate part of the following compound and not with *sthiti* the principal part, as it should be. When we take the compound as a *Karmadhāraya*, *Mālavāndam* is to be connected with *sthiti* which is the principal noun as qualified by the word *gaṇa*. A *gaṇa* or a corporate and poli-

tical union the Málavas constituted in B. C. 56 and laid down authoritatively (*śmaṣṭa*) that that event should be commemorated by making it the epoch of an era. I now proceed to show by direct evidence what the condition of the Málavas was in ancient times and how it changed subsequently as indicated by the inscriptions we have gone over.

In an article in this *Journal*, Vol. I, p. 23, I have stated that Alexander the Great met in central and lower Punjab two tribes of warriors named Malii and Oxydrakæ. From Pāṇini's *sūtra* V, 3,114 and from the instances given by his commentators it appears that in the Punjab there existed in ancient times two tribes of the names of Málavas and Kshudrukas who are called *dyudhājīvas*, i. e., sustaining themselves by the use of warlike weapons, in other words, who followed a soldierly profession. Under the *sūtra* IV, 2, 45 Patañjali discusses why Kshudraka and Málava are included in the group "Khaṇḍikā" and others and in the course of the discussion he and the *Kāśikā* mention that these two tribes belong to the Kshatriya order—he, impliedly, and *Kāśikā*, expressly. Since the two names occur in the group and as it is reasonable to suppose that the first three words of a group at least come down from Pāṇini himself Kshudrakas and Málavakas were known to Pāṇini himself.

The Málavas are mentioned in the *Mahābhārata* also sometimes among northern peoples (II, 32, 7. III, 51, 26); and sometimes among southern, with Dākṣiṇātyas and Āvantiyas (VI, 87, 6-7). It also mentions westerly (*prasthīya*) and northerly (*udīchya*) Málavas (VII, 7, 15; VI, 106, 7). Varāhamihira too places the Málavas among the northern peoples inhabiting the Punjab (*Bṛi. S.* 14, 27). In speaking of a man of the name of Málavya he represents him to be ruling over Málava, Bharakachchha, Surāshṭra, etc. (*Bṛi. S.* 69, 10-12); so that the Málava country is here alluded to as occupying the same position as it does in modern times. Kālidāsa in his *Meghadūta* carries his cloud messenger over the country now named Mālwa but does not give that name; and mentions Daśārṇas, Vidiśā, Avantis, Ujjayini, and Daśapura. So that it is clear that according to these authorities the Málavas in ancient times lived in the north, that is, in the Punjab and that they subsequently migrated southwards. While in the Punjab they were simply *dyudhājīvas* or professional soldiers and do not seem to have formed a political union. Their migration to the south and settlement in the region just to the north of the present Mālwa in the modern state of Jaipur is evidenced by a very large number of coins found at Nāgar near Tonk. Most of these bear the legend *Mālavānām jaya* and some *Mālavagaṇasya jaya*. The very fact that coins were issued proclaiming the triumph of the Málavas or the Málava-gaṇa shows that at the time when they were issued the Málavas had already constituted themselves into a political unit with a regular system of government. That system appears to have been republican and not monarchical; since the legends on the coins bear the name of the tribe and its *gaṇa*. Probably afterwards the names of the leaders of the Republic were engraved on the money that was issued and perhaps in the course of time the Republic was succeeded by a Monarchy. The Málavas gradually moved southwards and gave their name to the whole country now called Mālwa. Another instance of a race moving from the south to the north and giving their name to the countries they occupied from time to time is that of the Gūrjaras. They first settled in Punjab and a district of that Province is called Gujarāta to this day. Then they migrated southwards by western Rājaputānā which was formerly called Gūrjaratrā or the protector of the Gūrjaras. This name, however, that part of the country soon lost, and in the form of Gujarāt it was transferred to a southern province which is now called by that name.

The years of the era founded by the Málava republican body had the name *Kṛita* given to them according to the new inscription and there are two dates at least in which the years are given with the epithet *Kṛitesha* prefixed to them. In the absence of any specific information we can only suppose that they were called *Kṛita*, because they were "made or prepared" for marking dates by the Málava government.

KUMARILA'S ACQUAINTANCE WITH TAMIL

BY P. T. SRINIVAS IYENGAR, M. A.; VIZAGAPATAM.

Burnell has quoted, *ante*, Vol. I, p. 310, a passage from the *Tantra-Vārtika* of Kumārila-Bhaṭṭa, beginning with the word *Āndhra-Drāviḍa-śāśahāyām*; and, being puzzled by the singular locative termination, has remarked that the phrase is a "vague term by which the Tamil language is mentioned." Dr. Sten Konow in p. 277 of the *Linguistic Survey of India*, Vol. IV takes the phrase to describe "the language of the Āndhras (i. e., Telugu) and Drāviḍas (i. e.,

Tamilians).” He remarks that *Andhra-Drāviḍa-bhāṣā* was Kumārila’s name for the “Dravidian family” of languages and translates the same word in page 284 by “the speech of the Āndhras and the Drāviḍas” (shortening *drāviḍa* into *Drāviḍas*, it is not known why). The singular suffix is explained by Dr. Konow as denoting “a difference of dialect, which is by no means certain,” and, if true, he adds that the “Kanarese and Tamil would be included in the *drāviḍa-bhāṣā*, as against Telugu, the *āndhrabhāṣā*.” All this is wasted ingenuity, for both in the printed text of the *Tantra-Vārttika* and in the MS. copy (in Telugu script) used by Dr. Ganganath Jha, the translator of the *Tantra-Vārttika*, the reading is *atha drāviḍādbhāṣāyām*.

The whole passage as printed by Burnell, is full of errors and unauthorized alterations by a Tamil copyist; I therefore transcribe it below :—

Tad-yathā, Drāviḍādbhāṣāyām-eva tadvad-ryaṇyanta-bhāṣā-padeshu svarānta-vibhakti-stri-pratyayādi-kalpandbhāṣā-eva-bhāṣānūrūpān-arthān pratipadyamānāḥ dṛṣyante. Tad-yathā, odanam chor ity-ukte chora-pada-vāhyam kalpayanti. Panthānam atar ity-ukte atara iti kalpayitvā dhuh, “Satyam, dustaratedi, atara eva panthā,” iti. Tathā pāp-jābham pakāśāntam sarpa-vachanam; akāśāntam kalpayitvā, “Satyam, pāpa eva atar,” iti vadanti. Evam māl-jābham stri-vachanam mālā iti kalpayitvā, “Satyam,” iti dhuh. Vair-jābham cha rephāntam udara-vachanam vairi-jābham pratyāmānyam vadanti, “Satyam, sarvasya kshudhitasya akāśe pravartantī udaram vairi-kāśe pravartate,” iti. Tad-yathā Drāviḍādbhāṣāyām tdrīṣi svachchhandakalpand tadd Pārasī-Barbāra-Yavana-Raumakādi-bhāṣāsu kim vikalpya kim pratipatsyante iti na vidmah.

The passage occurs in Kumārila’s discussion of *Mīmāṃsā-sūtra* I. iii. 9 *choditam tu pratiyeta avirodhāt pramāṇena*. This *sūtra* ordains that words borrowed from *mlechchhā* languages and used in the Veda, ought to be understood in the sense they have in the *mlechchhā* languages and not to be ascribed new meanings based on the *Nirukta*. Sabara gives four such words in illustration, *pika*, cuckoo; *nema*, half; *tamarasa*, lotus and *sata*, a hundred-holed, round, wooden bowl—these words, having been borrowed, according to *Mīmāṃsā* tradition, by the Vedic Rishis from *mlechchhā* tongues. Discussing this question further, Kumārila uses the opportunity for airing his knowledge of five words from the *Mlechchhā* tongue, Tamil, which he, no doubt, had casually picked up from some Tamil man. So he says that when the Aryas hear *mlechchhā* words, they add to or drop from them some sounds and make them resemble Sanskrit words, though not necessarily of the same import. “Thus in the Drāviḍa, etc., language, where words end in a consonant, (the Aryas) add a vowel, a case inflection, or a feminine suffix and make them resemble significant words of their own language. Thus when food is called *chor*, they turn it into *chora*; when a road is called *atar*, they turn it into *atara* and say, ‘true, a road is *atara*, because it is *dustara*, difficult to cross’. Thus they add *a* to the word *pāp* ending in *p* and meaning a snake, and say, ‘true, it is a sinful being.’ They turn the word *māl* meaning a woman into *mālā*, and say, it is so.’ They substitute the word *vairi* in place of the word *vair*, ending in *r* and meaning stomach, and say, ‘yes, as all hungry people do wrong deeds, the stomach undertakes to do wrong (*vairi*) actions.’ When such changes are freely made in the Drāviḍa, etc., language, what changes can be made in Persian, Barbara, Greek, Latin and other languages, and what words can be got thereby, I do not know.”

It is to be noted that Kumārila misquotes four of the five Tamil words he gives. Three out of the five do not in Tamil end in a consonant, but in *u*, and Kumārila clips the final short vowel as North Indians do in speaking Sanskrit words and imagines his mutilated form to be the Tamil form. Besides he drops the nasal of the word for snake, perhaps for fitting the word to the point to be illustrated. The Tamil words are *choru* more properly *śoru*, *pāmbu*, *vayiru*, the final vowel in each case being *u* made with the lips unrounded. By the word *Māl*, said to mean woman, Kumārila perhaps means Tamil *ammāl*, woman. Perhaps he heard women called *Sitammāl*, *Maṅgammāl*, etc., and broke them up into *Sitā+māl*, *Mangā+māl* and thus arrived at the word *māl*. The only word Kumārila quotes correctly is *atar*, more properly, *adar*, a word not now used in Tamil speech, so far as I know, except perhaps in some dialect unknown to me. From a Tamil dictionary, I learn, it means ‘way,’ and *adarāl* means highway robbery. It is curious that the only word Kumārila gives in a correct form is an obsolete word.

The misreadings of Burnell’s copy are also interesting. The copyist was, no doubt, a Tamil man for, not knowing the word *atar*, he boldly substituted *naḍai*, and has thus turned the remark about *atara* into nonsense; and not being able to trace Kumārila’s *māl*, he changed it into *āl*, a man.

I am not able to explain the *ādi* in Kumārila’s *Drāviḍādbhāṣā*. Probably it is an expletive meaning nothing.

THE REAL AUTHOR OF JAYAMANGALA, A COMMENTARY ON
VĀTSYĀYANA'S KĀMASŪTRA.

BY PANDIT CHANDRADHAR GULERI, B. A.; AJMER.

In Mahāmahopādhyāya Paṇḍita Durgā Prasāda's edition, Vātsyāyana's *Kāmasūtra* is accompanied by a commentary named *Jayamaṅgalā*, therein ascribed to one Yaśodhara. At the end of every *adhyāya*, the colophon is as under—

इति श्रीवात्स्यायनीयकानसूत्रटीकायां जयमङ्गलानिधानायां ।
विदग्धाङ्गनाविरहकातरेण युद्धस्तेन्द्रपाशनिधानेन वयोधरेणैकवकृतसूत्रनाम्नायां ।
— — — अधिकरणे — — — अन्त्यः ॥

To me it appears clear from the above that the commentary, named *Jayamaṅgalā*, was not the work of Yaśodhara, who occupied himself, during his separation from a cultured lady, in writing out the *śāśhyā*, immediately after its corresponding text. The commentary existed before him, but was separate from the text of the *Sūtras*. Yaśodhara whiled away the days of his separation by putting the text and the commentary together. For this labour he has been amply rewarded, by being called the author of the old commentary for hundreds of years!

To the second edition of *Kāmasūtra*, Paṇḍit Durgāprasāda's son has added an appendix containing the commentary on the last book which in the former edition was without it. This part of the commentary is printed from a Viśānagaram manuscript, and its colophon is—

इति सप्तमेऽधिकरणे द्वितीयोऽन्त्यः । आवृतः पट्टविद्यः । समाप्तं च कानसूत्रटीकायां जयमङ्गलाख्याया-
नौपनिषदिकं नाम सप्तममधिकरणम् ॥

Here we come across at least one manuscript of the commentary not tampered with by this worthy. From a close examination of the commentary one finds another interesting thing. This long colophon, giving the autobiographical details of the redactor, is found at the end of every *adhyāya*, but at the end of every *prakaraṇa*, there is another pithy colophon incorporated in the text. The text is doubly divided into *prakaraṇas* and *adhyāyās* as well as into *adhyāyas*. The text marks the end of *adhyāyas* and *adhyāyās* by a colophon which the redactor follows, while the original commentator seems to have marked the ends of *prakaraṇas* only. He did not think much of the division of the text into *adhyāyas* also, when it was already divided into *prakaraṇas* and *adhyāyās*, for he says—

तत्राभ्याससंख्यानं पूर्वशास्त्रेभ्य इदं स्तोत्रमिति रचनार्थम् । प्रकरणमधिकरणसंख्यानमन्यनिरूपेणार्थम् । (p. 9)

In Paṇḍita Durgāprasāda's edition, these pithy colophons are not given for the first four *adhyāyas*, which are the same as the first four *prakaraṇas*. At the end of the fifth *adhyāya*, which is also the end of the fifth *prakaraṇa* and first *adhyāyāṇa*, the colophon, नायकसहायद्वन्द्वीयिनसौः पञ्चमं प्रकरणं पञ्चमोऽन्त्यः occurs in one MS. consulted and not in others; but after that these *prakaraṇa* endings regularly occur. From this I suppose that they were removed when a *prakaraṇa* and an *adhyāya* ended in the same place, to make room for the bigger and newer colophon but when the *prakaraṇa* endings did not coincide with the *adhyāya* endings they were allowed to stand.

I find further evidence of the fact that Yaśodhara was not the author of *Jayamaṅgalā* from a commentary of Kāmandaki's *Nṛisūtra*, published in Trivandrum Sanskrit Series No. XIV. This is also named *Jayamaṅgalā*, but its author is Sankarārya.

The following is the first verse of the *Jayamaṅgalā* on Vātsyāyana—

वात्स्यायनीयं किल कानसूत्रं प्रस्तावितं कैश्चिद्विद्वान्मयेव ।
तस्माद्विधास्ये जयमङ्गलाख्यां टीकामहं सर्वविदं प्रपन्नम् ॥

Compare this with the second verse of Sankarārya's *Jayamaṅgalā* on Kāmandaki—

कामन्दकीये किल नीतिशास्त्रे प्रायेण नास्मिन् सुगमाः वक्ष्यमाः ।
तस्माद्विधास्ये जयमङ्गलाख्यां तत्प्रवृत्तिकां सर्वविदं प्रपन्नम् ॥

Not only the names and the beginning verses, but the general styles of both the *Jayamaṅgalds* are similar. Both discuss questions of grammar in the same way and explain, criticise or quote references in the same spirited fashion of ancient commentators. Here is one passage from both in which the words and phrases are almost the same—

Vātsyāyana :—

यथा शब्दक्यो नाम भोजः कामाङ्गाक्षपकन्यामभिनन्दमानः सवन्धुरादौ विननासः।

Jayamaṅgald :—

शब्दक्य इति संज्ञा । भोज इति भोजवच्छब्दः । अभिनन्दमानोऽभिगच्छन् । स हि मृगयां गतो भार्गवकन्याना-
भ्रमपरे इहा जातरागो रयमारोन्ध जहार । ततो भार्गवः समिस्तुद्यानावायागस्य तानपद्वज्रभिधाय च यथावृत्तं
एवाननसिद्ययाप । ततोऽसौ सवन्धुराद् पांसुवर्धनावटक्यो ननास । तत्पाननयापि शब्दकारणमिति गीयते । (p. 24)

Kāmandaki's *Nītidra*—

शब्दक्यो वृत्तिः कामात् etc.

Saṅkarārya's *Jayamaṅgald*—

तत्र शब्दको नाम भोजवच्छब्दः । तन्निमित्तमसिद्धनामा शब्दक्यो नाम । स च मृगयां गतस्तृप्तिं भृवाभ्रमं
प्रविश्य तत्कन्यां रूपवौचनवतीनेकाकिनीं वृद्धा जातरागस्तौ स्वन्दनमारोन्ध स्वपुरनाम्नान । भृगुरपि समिस्तुद्या-
नीनासाय वनासागस्य तानपद्वज्रभिधाय च यथावृत्तं ज्ञात्वा जातकीधस्तं यथाप सन्निरहोभिः पांसुवृष्ट्या विपद्य-
तामिति । स तथाक्रान्तस्तपैव ननासः । (p. 20.)

Unless these be cases of unconscious similarity, I propose to conclude that Saṅkarārya commented on both the *Arthasāstra* of Kāmandaki and the *Kāmasāstra* of Vātsyāyana. He named both his works *Jayamaṅgald*, just as Mallinātha's commentaries on Kālidāsa are called *Saṅjivant*.

MISCELLANEA.

THE HARAPPA SEALS.

Out of the three Harappa seals, the facsimiles of which have been published by Dr. Fleet in the July issue of the *Journal of the Royal Asiatic Society* for 1912 on the plate facing p. 700, I propose here a tentative reading of the seal marked B, viz.



The letters may be called "Later Indian Hieroglyphs." Distinctively pictorial traces linger here only in two cases: the fish-picture letters on the seals (A and C),¹ and the tree-like letter in the legend of the seal B. The characters, on the whole, are nearer the system of the old Brāhmi than their pictorial predecessors.

No reading could be offered with any definite amount of certainty until specimens of these characters are available in much larger numbers.

Adopting the Brāhmi order I propose a reading of the legend of the above (B) Seal as:

lo-ba-vya-dī

And reading it from right to left we get:

*Di-vya-ba-lo*²

I take the first letter (in the latter order) to be derived from the picture of the *dāsu*, bow, and representing *da* or *dā*, the two bars standing for the *mātrā* *f* as attached to the *da*. The second figure I propose to read as *vya*,



standing for *v*, and



for *ya*. The

original hieroglyph for *ss* was probably a representation of the *viśā*, lute, and for *ya*, one of the *yonī*, as suggested by Cunningham.

The next symbol,  I think, represents *ba*, (See legend)

from which the Brāhmi  seems to have

come down. The original figure, it appears, reproduced some particular kind of tree. The last character may be read as *lo*, as Dr. Fleet has tentatively read the same character in the seal C.

The Brāhmi *la*  probably has its predecessor in the Harappa *la*. 

K. P. JAYASWAL.

¹ The figures on A and C have been conjectured to be either that of a deer or bull. The long tail and the hooves in C indicate that it is an attempt at representing the cow. The blurred portion between the hind legs in C probably represented the udder. There is a touch of domesticity in the little cover over the animal, like one seen up-country over the 'begging cows' of Jogis, and in the mark of a vessel below the mouth of the animal. There seems to be also a band round the neck.

² On the same principle I would read the legend of C, as:

Ta-pū-lo-mo-lo-go=tripura-mayuraka?

A FEW REMARKS ON PROFESSOR PATHAK'S
PAPER ON DANDIN, THE NYASAKARA AND
BHĀMAHA.

In his paper on "Dandin, the Nyāsakāra and Bhāmaha," *Ante*, Vol. XLI p. 232, Prof. K. B. Pathak has said: "Mr Narasimhachar quotes from this verse the words पाणिनीयस्य भूयोन्वासे षष्ठावतारे and would have us believe that the second word न्वास in this verse is the name of Pūjyapāda's commentary on Pāṇini. This view is amply refuted by the Hebbur plates, which describe king Durvinita:

सम्भावतारकार-वैव-भारतीनिबन्ध-वृहस्पयः Ep. Car., Vol. XII, p. 17. 'He who was restricted to the path of eminence by the words of Deva [Devanandin], the author of the *Śabdavātara*.'

I do not think I have taken the word न्वास as the name of Pūjyapāda's commentary on Pāṇini. A reference to my paper¹ will clearly show that I have taken the word in the sense of a commentary on grammar.

With regard to the passage quoted from the Hebbur plates, it has to be mentioned that the interpretation put on it is no longer tenable, the passage making no manner of reference to either Devanandin or his *Śabdavātara*. In a 'set of copperplates,' recently discovered at Gummarēḍḍipura, Srīnivāssapur Taluk, Kolar District, which is dated in the 40th year of king Durvinita's reign and may be assigned to the early part of the sixth century, the corresponding portion runs thus:

सम्भावतारकारेण वैवभारती-निबन्ध-वृहस्पयेन किराता-
जुनीये पञ्चदशसर्गदीकाकारेण सुर्वीनीतनामधेयेन.

This makes it quite plain that Durvinita was himself the author of a *Śabdavātara*, as also of a Sanskrit (*Devabhāratī*) version of the *Paśādchī Vajjakathā* or *Bṛihatkathā* of Guṇāḍhya and of a commentary on the fifteenth sarga of the *Kīrtārjunīya*. We thus see that there is no ground at all for the supposed connection or contemporaneity of Devanandin or Pūjyapāda with Durvinita. The passage from the Hebbur plates, which are of a later date than the Gummarēḍḍipura plates, can now be confidently corrected thus: सम्भावतारकारो वैवभारती-निबन्ध-वृहस्पयः. That Durvinita was the author of a commentary on the *Kīrtārjunīya* had long been known, but

his authorship of the other two works is gathered for the first time from these new plates. It is of considerable interest to know that there came into existence, though unfortunately it has not come down to us, a Sanskrit version of the *Bṛihatkathā* as far back as the 6th century A. D. The versions now extant are those of Somadēva and Kāhemendra, of the 11th century, and that of Budhasvāmi, styled *Bṛihatkathā-sloka-saṃgraha*, recently published in Paris by Prof. F. Lacote, who is of opinion that it was composed between the 8th and 9th centuries.² Prof. Lacote also writes to me: "I believe Budhasvāmin's work is based on an older Sanskrit version of the *Bṛihatkathā*, for his version shows by the side of traits relatively modern traces very curious of archaism." This earlier version may in all probability be Durvinita's.

Further, as shown above, the *Śabdavātara* mentioned in the passage quoted from the Hebbur plates, is a work by Durvinita himself. It is true that Pūjyapāda's *Nyāsa* on Pāṇini is also named *Śabdavātara* in a Mysore inscription, dated A. D. 1530, which is quoted by Prof. Pathak, but this work must be quite different from its namesake referred to above. The latter, which has not likewise come down to us, may have been a *Nyāsa* on Pāṇini just like Pūjyapāda's; and it is just possible that Bhāmaha's reference is to this work, though, from the nature of the case, it is not possible to lay much stress on the point.

Prof. Pathak says: "Rakṛilagomin was Reverend Rakṛila, a Buddhist, and his son Bhāmaha was also a Buddhist." It is not clear on what evidence this assertion is based. If Bhāmaha were a Buddhist, we might reasonably expect some clue, however slight, to his religion in the illustrative stanzas, which, according to him, were composed by himself. On the contrary, we find in these stanzas references not only to the stories of the *Rāmāyaṇa* and the *Mahābhārata* but also to the deities Śiva, Viṣṇu, Govinda, Pārvatī and so forth. Further, in the fifth chapter of his work, which deals with the logic of poetry, occurs the expression पश्यन् सत्त्वृत्ति हि. I am not sure if a Buddhist would express such an opinion.

¹ *Ante*, Vol. XLI, p. 90.

² See *Mysore Archaeological Report* for 1912, paras 65-69.

³ See his *Essai sur Guṇāḍhya et la Bṛihatkathā*, p. 147.

As Bhāmaha criticises the division of उपमा into निम्नोपमा, प्रसंगोपमा and आचिखवासोपमा, and as these are found in the *Kāvyādarśa* along with several other varieties, Prof. Pathak has come to the conclusion that Daṇḍī is anterior to Bhāmaha. He says further: "The justice of Bhāmaha's criticism will be at once admitted if we recollect that these numerous varieties are not recognised by Sanskrit writers on *Alaṅkāra*, who succeeded Bhāmaha. Nor can it be urged against this view, that Daṇḍī copied these thirty-three varieties from some previous author, since such a presumption is rebutted by the fact that Nripatūṅga has admitted most of these *upamā* into his *Kavirājamārga* II, 59-85." I venture to think that Daṇḍī could not have been the originator of the above-mentioned varieties of उपमा, nor can the fact that most of them have been adopted by Nripatūṅga, a later writer, prove that he was so. In the verse पूर्वशास्त्राणि संख्य * Daṇḍī clearly admits his indebtedness to previous authors, and as a fact, we find some of his varieties, e. g. निम्नोपमा and प्रसंगोपमा in the *Nāṭyaśāstra*† of Bharata.

I may remark in passing that the well-known line लिम्पतीव has now been traced to two of Bhāsa's dramas, namely, *Chārudatta* and *Bālacharita*, by Pandit Ganapati Sastrī‡ of Trivandrum.

It is gratifying to note that Prof. Pathak, following a different line of argument, has come to the same conclusion as myself with regard to the period of Daṇḍī, viz., the latter half of the 7th century.

R. NARASIMHACHAR.

SOME NOTES ON BUDDHISM.

AMONG the problems regarding the origin and history of Buddhism, the most interesting refer to the original language of Buddhism and to the prime original tradition upon which the various schools into which Buddhism was early divided have drawn. In the year 1909 a little work of the highest importance on the question of the formation of the Pāli canon was published by Professor Sylvain Levi (*Les Saintes Ecritures du Bouddhisme*) which has been translated into English by me. Professor Herman Oldenberg has recently brought out *Studien Zur Geschichte des Buddhistischen Kanon* in which he fully recognises the value and indispensable importance

of the Chinese versions upon which Prof. Sylvain Levi has relied. Prof. Oldenberg brings out a few fresh points which will be studied with interest by the schools of Ceylon, Siam and Burma. He produces a number of parallels from the Pāli texts to the *Diryāvadāna*. He shows that the Pāli school is mentioned by the *Diryāvadāna*. He admits that the Pāli is not the original language of Buddhism and that the Pāli canon is translated from the Māgadhi. He examines carefully the Pischel fragment of the Sanskrit *Anguttara Nikāya*, and, with the help of the Chinese rendering furnished by Prof. Sylvain Levi, is enabled to correct the Pāli text; and interprets the whole differently from the construing of the passage by Pischel. Both the scholars emphasise the capital nature of the critical study of Prof. Anesaki on the four Buddhist Agamas in Chinese. Prof. Oldenberg devotes some pages to the literary history of the *Jātaka* and examines finally the history of the canon as constructed by Prof. Sylvain Levi. He is of opinion that the artists of the Bharhut and the Sanchi Topes were acquainted with a later version of the life of the Buddha than that preserved in the Pāli texts. He is of the same opinion as Prof. Lüders that the original language of Buddhism was the old Ardha-Māgadhi. A very interesting fact is the prohibition of image worship by the Buddha as hinted at by Prof. Oldenberg. It would be highly interesting to gather together from the oldest portions of the *Tipitaka* direct interdiction of idol worship.

Another contribution of high value from the same distinguished Professor at Göttingen is the *Studien Zum Mahāvastu* which explores the Sanskrit work and takes up the search for parallels, where it was left by Prof. M. Senart and Prof. Windisch. Though generally the Professor is enabled to prove the superiority of the Pāli texts, he himself is the first to bring into prominence such passages in Pāli as have been emended with the help of Sanskrit. A striking instance of the *Mahāvastu* supplying a gap in the Pāli text, as published both in London and Siam, is given at p. 131. Prof. Oldenberg gives ample instances where the Sanskrit text is more brief than Pāli, and asserts that these are so many exceptions which prove the rule. At times he himself is in doubt to decide which is the older,

* *Kāvyādarśa* I, 2.

† *Kāvyamālā* edition, XVI, 43-50.

‡ See his edition of Bhāsa's *Svapneśvadevātīkā*, Trivandrum Sanskrit Series, No. XV, Introduction, p. XIII.

the Pāli or Sanskrit (p. 135). Here and there Prof. Oldenberg finds traces of the prime canon on which both the Pāli and the Sanskrit are based (p. 150). Prof. Oldenberg objects, in the light of Central Asian discoveries, to the assertion of Prof. Rhys Davids that the old *vinaya* had never been translated into Sanskrit.

In the *Journal Asiatique*, Sept. and Oct. 1912, Prof. Sylvain Levi gives an exhaustive study of the *apramāda-varga* and the Sanskrit *Dharmapada* discovered by the Pilhot mission. A very interesting fact deduced by Prof. Sylvain Levi from the Chinese authorities is that a portion of the *Dharmapada* was translated from Sanskrit into Chinese by a fire-worshipper converted to Buddhism and that the *Mahāyāna* mentions the *Dharmapada*.

Perhaps of still greater value and interest is the Professor's dissertation on the pre-canonic language of Buddhism in the *Journal Asiatique*, Novem. and Decem. 1912. The conclusion of his most fascinating study seems to be that the Aśoka edict of Bairat mentions portions of the Buddhist scriptures in the language in which they were first given out, that is to say, the prime language of Buddhism. I hope to give a more detailed notice shortly of Prof. Sylvain Levi's studies, which, if accepted, must greatly modify our views of Ur-Buddhism and its language.

Theorie des douze causes by Prof. L. de la Valle Poussin is his further study of the Buddhist theory of the *pratityasamutpāda*. The Professor uses, besides the Pāli canon, the Tibetan *Shālistambastūtra*, and Sanskrit works among them the invaluable *Abhidharmakośha* of Vasubandhu. Sanskritists interested in Buddhist philosophy will be glad to learn that the Belgian Academy will soon bring out the third *kośha* and that Prof. Sylvain Levi is engaged on the first dealing with *vijñāna* and *śaṅkayātana*.

G. K. NARAYAN.

KARASKARA OR THE KATKARI TRIBE.

(Translated from Mr. V. K. Rajwade's *Marathi essay*.)

(1) Along with the words *Āraṭṭa*, *Paṇḍra*, *Sauvra*, *Vaṅga*, *Kaliṅga* and *Prāpūna*, expressive of those countries and their peoples, the word *Kāraakara* also occurs in the 14th *sūtra* of the second *kaṇḍikā* in the first *adhyāya* of the first *prāśna* of

the *Bauddhāyana-dharma-sūtras*. This same word *Kāraakara* is met with in the 44th Chapter of the *Keraṇaporaṇa* of the *Mahābhārata*. In both these places, this word is used to denote a tribe of barbarians. *Bauddhāyana* has prescribed an expiation for those who might have incurred the guilt of visiting the country of these people. Dr. Bühler thinks that they must have lived in the South. (*Vide*, note on p. 148, *Sacred Books of the East*, Vol. XIV). This ingenious suggestion, if accepted—and we for ourselves see no objection to it—enables us to throw a new and a better light upon the 156th *sūtra* *kāraakaroṣṭikāḥ* occurring in the first *pāda* of the sixth Chapter of Pāṇini's *Aṣṭādhyāyī*. The *Pāraakaraḍi* group also includes this word *Kāraakara*, which stands second there. There is, therefore, no doubt, that Pāṇini knew the term *Kāraakara*. Some people include it in the *Kāakadi* group, but this is not generally allowed. The expression *Sūtra Kāraakaro ṣṭikāḥ* means a tree growing in the country called *Kāraakara* and itself having the same name. Pāṇini,² we thus clearly see, well knew two facts—(1) that *Kāraakara* was the name of a country and (2) that the trees from that country were also called *kāraakara*. Of course, if the suggestion that *Kāraakara* must be some southern country—lying to the South of the Vindhya mountains—be approved, then we may surely say that this southern country called *Kāraakara* was known to Pāṇini, who, moreover, knew that a very precious kind of timber was being imported from that country into Northern India, in his time.

(3) Now, *Bauddhāyana* tells us that *Kāraakara* is the name of a barbarian tribe. Let us try to find out, who these people must have been and what must be the present corruption of their name. We think that these *Kāraakaras* of the time of Pāṇini and *Bauddhāyana* are the present *Kātkaris* of *Mahārāṣṭra*. The name *Kātkaris* can be derived thus:—

कारस्कर = कारचकर = काचकर = कातकर.

As at present, so in ancient times, these *Kātkaris* used to live in the *Mahākaśāpāra* to the south of the Vindhyas and the country which they occupied came to be called *Kāraakara* after them. The derivation of this word given in the *Bombay Gazetteer* is thoroughly untenable. Pāṇini thus must have known the *Kāraakara* country, the *Kāraakara* tree and possibly also the *Kāraakara* people.

K. C. M.

² The original essay is published in the *Report of the Bharat-Bhāsa-Samohodāh-Mandal* Vol. III Part II.

THE VADNER PLATES OF BUDDHARAJA.

In December 1912, I discovered at Vadner in the Chāndor Talukā of the Nāsik District a set of two copperplates. They contain a grant issued by Buddhārāja, son of Saṅkaragana, son of Kṛṣṇarāja of the Katachchuri family of Central India, which appears to be an Imperial dynasty.

The characters belong to the southern variety of alphabet and resemble those of the Ābhōna¹ plates of Saṅkaragana and the plates of Buddhārāja found at Sarsavpi², a village 4½ miles from Pādrā in the Barodā State. These last bear the date, the 15th of the dark half of Kārtika of the year 361 of the Kalachuri era. The Vadner plates record an earlier grant, dated *Bhādrapada tuddha trayodasi* of the year 360 of the same era. The date does not admit of complete verification. Attention is invited to Dr. Kielhorn's remarks on the Sarsavpi plates of Buddhārāja. (*Ep. Ind.* Vol. VI. p. 295). Diwān Bahādur Pillai of Madras has kindly furnished me with three dates, viz. (1) A. D. 607, Friday, 11th August, (2) A. D. 608, Thursday 29th August, and (3) A. D. 609, Tuesday 19th August, one of which corresponds to that occurring in our grant. I am inclined to accept the third or the last date.

The Kalachuris³ are mentioned in the Miraj grant, the Nerūr plates (*Ante* Vol. VII, p. 161), the Sāṅkhādā plate of Sāntilla (*Ep. Ind.*, Vol II, p. 23), the Aihole⁴ and Mahākūpa⁵ or rather Makūṭśvara column inscriptions.

The last record states that Buddhārāja was defeated by Maṅgalīśa of the Chalukya dynasty, who took possession of all the wealth of the former. From this⁶ one is apt to suppose that

the power of the Kalachuris of Central India was crushed for ever. But the Sarsavpi and the Vadner plates prove that Buddhārāja must have made good his resources, and reclaimed at least the territory from Gujarāt to the Deccan, which probably formed the integral part of the empire. The Vadner charter was issued at the request of Queen Anantamāhāyī by the illustrious Buddhārāja while his camp was pitched at Vidiśa. It was made for the purpose of defraying the cost of the five great sacrifices, *bali, charu, vaiśvadeva, agnihōtra* and others. The name of the *dātaka* (messenger for the conveyance of the grant) is Prasahyavigraha,⁷ the great officer appointed over the army, and that of the writer is Nāphita⁸, the minister who had to look to the arrangement of peace and war.

The donee is Boṭasvāmin or Boḍasvāmin of the Vājasaneyi-Mādhyandina school and of Kāśyapa *gōtra*, and a resident of Vatanagara, doubtless the modern Vadner in the Chāndor talukā. It was the headquarters of the *bhōga* of that name. *Vada* is the Prakrit form of *Vaṭa* and *negara* is shortened into *nēr*. We thus get Vadner. The village granted is said to be near Bhaṭṭaurikā, which may very possibly be Bhāṭgaon about 9 miles from Vadner.⁹

As my paper on the Vadner plates will be published later on, it is needless to dilate on other points here. The above summary is given, as antiquarians are always naturally anxious to learn the salient facts mentioned in an ancient inscription newly brought to light.

It will be noted that the present grant is only the third known issued by the imperial Kalachuri family.

Y. R. GUPTA.

BOOK-NOTICE.

A PRIMER OF HINDUISM by J. W. FARQUHAR. Second Edition. Oxford University Press; London, Henry Frowde, 1912.

THIS is a remarkable book both on account of its contents and its authorship, for it has been written by the Literary Secretary of the National Council of Young Men's Christian Associations

in India and Ceylon, and it is a careful and competent historical account of that form of religion, which is known as Hinduism. The reader is taken successively through the prehistoric period, when primitive animism was first developed in the family, to the Vedic times and the rise of the priesthood and theology.

¹ *Ep. Ind.*, Vol. IX, pp. 296 to 300.

² Dr. Fleet has shown that the forms Kalatsūri, Kalachuri, Kalachuri, Kaṭachchuri and Kāṭachchuri are identical and are applied to the same family (*Ante*, Vol. XIX, p. 16).

³ *Ep. Ind.*, Vol. VI, pp. 1 to 12.

⁴ The date of the Makūṭśvara column inscription is 12th April 602 A. D. or thereabouts.

⁵ Prasahyavigraha is also the *dātaka* of the Sarsavpi grant.

⁶ *Ante*, Vol. XIX, p. 9.

⁷ *Ibid.*, Vol. VI, pages 294 to 300.

⁸ *Ante*, Vol. XIX, pages 7 to 20.

⁹ Line 34.

Thence to the philosophic period and the formation of the religious doctrines, which laid the foundations of Hinduism as a distinct form of belief, with its offshoots of Buddhism and Jainism, and to the scholastic period, when the doctrine became defined in authoritative writings and manuals. The author then passes on the period of the deification of heroes, which has had so great an effect on the Hinduism of to-day and on its allied religions, and to the days of which he calls decadence, giving birth to the exclusive sectarianism from which India has never recovered, despite the efforts of the great general orthodox sects and of the unorthodox eclectic reformers that arose in mediæval times, with their doctrines of faith and pure deism. And finally he deals with the modern revival of Hinduism as a patriotic stand against the enormous influence of Western ideas on the populace since the advent of British rule and the Christian Missionaries.

All the vexed questions involved in such a survey are treated with historical fairness and wide knowledge and with true sympathy. The style is clear and brief. The reader is shown the history, religion and literature of each period, with illustrative readings and delightful representative texts, and there are also attached to each chapter a series of most careful tables, exhibiting in the briefest and clearest form possible such points as caste, orders of Brahmans, the growth of the Vedas, the chief schools and their *Brāhmaṇas*, Hindu chronological ideas, the *Upanishads*, *Śruti* or the Hindu Canon, the *Sūtras*, the Manuals of the Vedic Schools, the Buddhist *Tipitaka*, the chronology of the Incarnation, the systems of Hindu Philosophy, the Sectarial Literature, the Vaishnava, Śaiva, Kṛishnaite, and Bhāgavata Schools, and the mediæval reformers.

There are also useful chapters on the outline of the history of the Hindu family, Indian asceticism, modern Hinduism as a system, the animism of the outcaste classes, and the Hindu social organization.

To missionaries who would learn something of the religious ideas that dominate those amongst whom they work, and to all Europeans who would wish to understand, even dimly, the mental attitudes towards religion of those among whom they dwell or with whom they come in daily contact in India, this book is an invaluable *read mecum*.

R. C. TEMPLE.

HISTORY OF AURANGZEB. Mainly based on Persian sources. By J. N. SARKAR: 2 vols. M. C. Sarkar & Sons, Calcutta 1912. Rs. 3-8. 5s. net.

These two volumes comprise in reality the reigns of Shāh Jahān and Aurangzeb, and their main value lies in the fact that they bring before

the student the first connected authentic account of these two reigns. Hitherto, all that has been available to the English enquirer of an authoritative nature, apart from Lane-Poole's monograph in the Rulers of India series, are the disconnected translations of Elliot from vernacular authors, which have the further disadvantage of being out of strict chronological order and very difficult to collate.

The book is well put together and the footnotes are of special value, as they not only give chapter and verse for the statements in the text, but provide an extensive bibliography which cannot but be of the greatest assistance to the student of this period of Indian history.

It is pleasant to observe that the author warmly acknowledges his indebtedness to the assistance afforded him by the late Mr. William Irvine, to whose unselfish generosity many other writers on Indian historical subjects have owed so much.

On the other hand, the unpleasant feature of the book is the absence of an index, for which the long list of contents does not compensate the student. One knows how much it goes against the grain of the true Oriental to concoct an accurate index, but when it comes to the author's turn to dive into as many volumes as the present writer has had to consult in the course of his historical studies, he will realize the supreme value of a competent index in saving time and labour.

R. C. TEMPLE.

GRANTHA-PRADARSANI (Nos. 34-39). Edited and published by S. P. V. RANGANATHASWAMI ARYAVARACURU. Printed by G. E. KRISHNA MURTI, at the Araka Press, Vizagapatam.

THE editor of this monthly is not unknown to the readers of this Journal. In the numbers referred to are published *Prākṛita-sarvasvas* of Mārkaṇḍeya-kavindra and *Aphorisms of Jaina Prākṛit Grammar* of Trivikrama. No pains seem to have been spared in properly editing these works. Some of the works so far published in this monthly are Śrīharsha's *Dvitrīpa-kosha*, Agastya's *Śabda-saṁgraha*, Saṁkara's *Saṁnyami-nāma-mālā*, Appayya Dīkshita's *Prākṛita-maṇi-dīpa*, Annambhaṭṭa's *Mittāśharā*, and *Diyaśūtricharitam*. He also contemplates editing Mādhavāchārya's *Ekikshara-rotana-mālā*, Mahādeva's *Upasarga-varga*, Sesha-Sri-Krishna's *Pada-chandrikā*, Kaṇḍa-Nydyabhāṣaṇa, and so on. There can thus be no doubt that Mr. Ranganathaswamin's one aim appears to be to publish rare and valuable Sanskrit works. And now that the old *Kāvya-mālā* is all but extinct, the value of his monthly can scarcely be overrated especially as it is being so well edited by him.

D. R. B.

THE OBSOLETE TIN CURRENCY AND MONEY OF THE
FEDERATED MALAY STATES.

BY SIR R. C. TEMPLE, BART.

(Continued from p. 185.)

APPENDIX IV.

Extracts from various authorities relating to the
Tin Currency of the Malay Peninsula.

I.

Denys, A Descriptive Dictionary of British Malaya, 1894.

S. v. Money. A great variety of small coins of brass, copper, tin and zinc are in circulation throughout all the (Dutch) Islands. The most frequent of these is the Dutch *doit*, of which about 300 ought to go to a Spanish dollar. The intrinsic value of all such coins, however, has no relation to their assumed one, and being usually over-issued, they are generally at a heavy discount.

The small coins of Kedah are of tin. They go under the name of *tra* (stamp, impression). Of these 160 are filed on a filament of rattan, of which 8 strings (*tali*), or 1280 coins, are considered equal to a hard dollar.

Chinese cash are often known as *pitis* by the Malays. This was the name of the ancient coins of Java, and is a frequent appellation for money in general, as well as for small change. Chinese coins of this description were found in the ruins of the ancient Singapore, of as early a time as the tenth century, and we have the authority of the first European that visited Borneo proper, the companion of Magellan, that they were the only money of that part of the Archipelago. 'The money,' says Pigafetta, 'which the Moors use in this country is of brass, with a hole for filing it. On one side only there are four characters, which represent the great king of China. They call it *pieis*' (*Primo Viaggio*, p. 121).

The absence of all other current coins than such as are now mentioned, previous to the arrival of Europeans is testified to by the Portuguese historian (Barro), and this even in Malacca, the most considerable trading emporium in the Archipelago. The enterprising Albuquerque, before he quitted that place after its conquest proceeded to supply this deficiency . . . 'he ordered money to be coined, for in the country gold and silver passed only as merchandise, and during the reign of the king Muhammad there was no other coined money than that made from tin, which served only for the ordinary transactions of the market.' (*Decade*, II. Bk. 2, ch. 2).

II.

*Newbold, Political and Statistical Account of the British Settlements
in the Straits of Malacca.*

2 vols. 1839.

Vol. II, p. 94. The following extracts from treaties made by the Dutch shew that they did not fail to profit by this opportunity of increasing the revenue of Malacca. Article I. of a treaty concluded by the Dutch Governor, West Boelan, in council with the Chiefs of Rumbowé (Rembau) and Calang (Klang) dated Malacca, 24 January 1760:—"The tin being the produce of Lingee (Linggi), Rumbowé and Calang, without any exception, will be delivered to the Company at 38 dollars a *bakara* of three *pikuls*, and this price will always continue without its being enhanced.

p. 96. The Dutch resumed their monopoly, as we find from the 7th article of a treaty, dated, Naning, 5 June 1819, between the Supreme Government of Netherlands India and Rajah Ali, the Panghulu and Ampat Suku, of Rumbowé which ran thus:—Rajah Ali, the Panghulu

and Ampat Suku, of Rambow, must give up to the Government all the tin from Lingee, Sungie-Ujong, Rumbow, and any place under their authority, without reservation. The Government binds itself to pay 40 Sp. dollars per *bahara* of 300 *kati* of 370 lbs." . . . On the resumption of Malacca by the English in 1825, the tin trade relapsed into the hands of private merchants.

p. 100. The tin assumes the shape of the ingots of commerce, of which there are two kinds, common in Sungei-Ujong, *tampang* and *kaping* or *bangka*. The former weighs from half a *kati* to two *kati*, and the latter from 50 to 60 *kati*; one *kati* is equal to one pound and three quarters.

p. 103. According to Mr. Crawford (*Hist. of the Indian Archipelago*, 1820), the cost of producing a *cwt.* of *bangka*²³ tin is but £ 1-2-8, whereas the cost of producing the same quantity of Cornish tin amounts to £ 3-4-7. The cost of a *cwt.* of the metal in Sungei-Ujong is estimated by an intelligent native at £ 1-8-0.

III.

J. R. A. S. Straits Branch, No. 10. 32 Nos., Singapore,
1878-99.

p. 246. In a MS. collection of Dutch treaties prepared in Batavia under the orders of Sir Stamford Raffles, while he was Lieut.-Governor of Java the following engagement is to be found. It is dated 15 August 1650, Cornelis van der Lyn being then Governor-General: "Contract with the Chiefs of Perak, dependent on Acheen, stipulating that the exclusive tin trade granted to the Company by the Ratoe of Acheen will likewise embrace the State of Perak; that is to say, that the same will in future be restricted to the Dutch Company and the inhabitants of Acheen. Yang-de-per Tuan, Sultan of Perak, further promises in obedience to the order received from Acheen to direct all foreigners now trading at Perak to depart without delay with an interdiction against returning hereafter. The Company to pay the same duty as at Acheen for the tin it shall export, and the value of the tin coinage to remain as it is at present: viz., 1 *bidor* for $\frac{1}{2}$ Sp. dollar, and 1 *bahara* of 3 *pikul* for 125 *bidor*²⁴ or 31 $\frac{1}{2}$ Sp. dollars.

P. 247. c. 1651. The first named, Peirah (Perak), is situated on the Malay Coast and is subject to the Queen of Acheh (Acheen). The Establishment, which is under the control of an *onderkoopman* is maintained by the E. Maatschappij solely for the trade in tin, which is obtained for ready money or piece goods at the rate of 51 Rix-dollars the *bahara*.

p. 258. We are told, in an extract from a Malay Chronicle of Perak, that for a *bahara* of tin the Dutch could pay 32 *reals* (dollars); the duty was 2 *reals* besides.

p. 262. In a contract between the Dutch E. I. Company and the Sultan of Perak, dated 1765, the latter engages to sell all his tin exclusively to the Dutch "at the rate of c. 36 $\frac{1}{2}$ or Sp. dollars 11 $\frac{1}{2}$ per (*pikul* of) 125 lbs., or per *bahara* of 375 lbs. Sp. dollars 34."

p. 267. The tin of Perak is said to be delivered to the Dutch "at the rate of 32 Sp. dollars per *bahara* of 428 lbs." (1786).

p. 268. Maxwell says (1883) that the old Perak currency, lumps of tin weighing 2 $\frac{1}{2}$ *kati* each, called *bidor*, have altogether disappeared.

IV.

Marsden, *History of Sumatra*, ed. 1811.

p. 172. "Tin called *timah* is a very considerable article of trade . . . The mines are situated in the island of Bangka, lying near Palembang and are said to have been accidentally discovered there in 1710 by the burning of a house . . . It is exported for the most part in small pieces or cakes called *tampang*, and sometimes in slabs" (*kaping*).

²³ I. e., from the Island of Bangka near Palembang in Sumatra.

²⁴ Stevens, *Guide to E. I. Trade*, 1775, p. 67, says exactly the same thing: "The Pecul contains 100 Catty or 378 lbs. or 125 *Bid*" (*bidor*).

V.

Raffles, Java, 1830, Vol. II. Appendix.

(1). *p. li footnote* The *pichis* is a small tin coin, of which 200 make a *wang*, and 28 *wang* are equal in value to a Sp. dollar.

(2). *p. claci*. In the local currency of Java, 10 copper doits make one *wang* (a small silver coin) and 12 *wang* one rupee.

(3). *p. clzeji*. The following table⁶⁵ shows the current value of the different coins circulating in Java:—

4	doits	make	1	stiver
10	"	"	1	dubbeltje
30	"	"	1	schelling
60	"	"	1	half rupee (Batavian, Sarat or Arcot)
120	"	"	1	rupee (ditto)
240	"	"	1	American or Austrian dollar
[other variants] ⁶⁶				
63	doits	make	1	half sicca rupee (Bengal)
126	"	"	1	sicca rupee
132	"	"	1	half Sp. dollar
164	"	"	1	Sp. dollar
190	"	"	1	rix-dollar (of account)
312	"	"	1	old ducatoon
320	"	"	1	new ducatoon

From these tables can be deduced the following useful scales and inferences:—

(1).	200	pichis	make	1	wang
	28	wang	"	1	Sp. dollar

5000 pichis to the Sp. dollar ∴ the *pichis* here are Chinese cash.

Also 24 *wang* go to the dollar, making 4800 *pichis* to the dollar. The rix-dollar (account) would run 4500 cash to the dollar.

(2).	10	doits	make	1	wang
	24	wang	"	1	dollar

240 doits to the dollar ∴ 2½ doits make 1 cent, and the doits is here the Dutch cash.

(3) General scale.

doits				
to the dollar	4	doits	make	1 stiver (cent)
10	2½	stiver	"	1 dubbeltje (wang)
30	3	dubbeltje	"	1 schelling
60	2	schelling	"	1 half-rupee (suku)
120	2	half rupees	"	1 rupee (jampal)
240	2	rupees	"	1 dollar

240 doits to the dollar ∴ 2½ doits make 1 cent and the doits is here the Dutch cash.

⁶⁵ Selections only; differently stated from Raffles for clearness.

⁶⁶ Showing how easily the reports of observers of the old time can be misinterpreted.

VI.

Thomas Bourey, *Malay Dictionary*⁶⁷, 1701.

10th Dialogue.

(1) Achée.

16	Miams	make	1	booncal
20	booncal	"	1	cattée
100	cattée	"	1	pecool
2	pecool ⁶⁸	"	1	bahar Malayo

The *bahar* contains of English averdupois weight : 396 *l.* 11 *oz.* 14 *gr.* The *booncal* contains of troy weight : 1 *oz.* 8 *dw.* 23 *gr.*

The aforesaid is the Malayo weight, but they also use the China *dachin* or stilliard for great weights, which is accounted so :—

10	coonderin	make	1	mas
10	mas	"	1	tial [<i>tahil</i> , tale]
16	tial	"	1	cattée
100	cattée	"	1	pecool
3	pecool	"	1	bahar Malayo

The China pecool contains of English averdupois weight : 131 *l.* 13 *oz.* 12 *dw.* The *tial* contains of Troy weight : 1 *oz.* 4 *dw.* 1 *gr.*

(2) Bamjarmasseen.

The weights used to weigh gold and silver is accounted so :—

3	matabooroong ⁶⁹	make	1	telaé [<i>téra</i> , <i>tra</i> : Chinese pron.]
6	telaé	"	1	mas
16	mas	"	1	tial

The *tial* contains of Troy weight: 1 *oz.* 8 *dw.* Ten *mas* is accounted a dollar weight, but if the dollar wants 4 *telaé* it is passable. One *mas* weight of gold is accounted the same value as a silver dollar; if so, 10 *mas* weight of gold, or one dollar weight of gold, is valued at ten silver dollars, but men may buy gold cheaper.⁷⁰ The dust-gold is near equal in fineness to English gold. For great weights they use the China stilliards.

(3) Succadana.

The weights used to weigh gold and silver is accounted so :—

3	matabooroong	make	1	telaé
6	telaé	"	1	mas
16	mas	"	1	tial

For great weights is used the China *dachin* or stilliard. The *tial* contains of Troy weight, 1 *oz.* 12 *dw.* 13 *gr.* The price of gold is 16 dollars a *tial*: its fineness is near as English gold.

(4) Passeer.

The weights used to weigh gold and silver are accounted so :—

3	mataboorung	make	1	telaé
6	telaé	"	1	mas
16	mas	"	1	tial

⁶⁷ A very rare and practically unknown book. Two copies in the British Museum.

⁶⁸ (?) Misprint for 3 pecool.

⁶⁹ Mataboorung, bird's eye; abrus seed. Cf. Milburn, *Oriental Commerce*, 1813, Vol. II., p. 415, where matabooroong becomes matabooroong and telaé becomes tela (*mitla*), which, when written by a Chinaman, represents *téra*.

⁷⁰ This means that the ratio of gold to silver was in the latter part of the 17th century 10:1 or less. For ratio of gold to silver in the Far East at various periods see *ant.* vol. XXVI. p. 310.

The *tial* contains of Troy weight: 1 oz. 5 dw. 1 gr. The gold is in fineness near the English gold, and is valued at 16 dollars the *tial*. For great weights is used the *pecool* and *cattie*: 100 *catties* = 1 *pecool*. The *pecool* contains of English averdupoiz weight 119 pounds.

(5) Extract from a Letter about Merchandize.

	(dollars	cents)
Black pepper: 25 <i>bahar</i> , each <i>bahar</i> 3 <i>pecool</i> , at 12 dollars the <i>bahar</i> ...	300	
White pepper: 15 <i>bahar</i> , at 22 dollars the <i>bahar</i> , is ...	330	
Dragon's blood: 5 <i>pecool</i> , at 45 dollars the <i>pecool</i> , is ...	225	
Bees-wax: 10 <i>pecool</i> , at 12 dollars the <i>pecool</i> , is ...	120	
Canes; 1000 ...	29	48
Factorage of 1025 dollars, at 2 per cent ...	20	12
	1025 ⁷⁰	

VII.

Chalmers, History of Currency in the British Colonies, 1893.

p. 332. For this settlement (Penang) the Company in 1787 and 1788 struck a silver coinage consisting of rupees, with half and quarter rupees and copper cents, half cents and quarter cents. . . . There were also 'pice' here usually of tin. For on 22nd March, 1809, a Government advertisement states that:—"whereas large quantities of spurious pice are now in circulation in this settlement and Government having ordered a new coinage of pice to the amount of 4,000 dollars, which with those that have been before coined at different times, by order of Government, will be sufficient for the purposes of general circulation. Notice is hereby given that on and after the first of next month no pice will be received into the treasury of this island, except such as have been coined by the order of the Government, as before mentioned, so that 100 of which pice shall not weigh less than 4½ catties of pure tin."⁷¹

Though the (E. I.) Company had established the rupee as the standard coin in Penang, the trade relations of the settlement constrained the mercantile community to adopt as their standard, not the Indian coin, but the universal Spanish dollar, the coin familiar to the conservative races with whom they had commerce. Therefore from the earliest days of Penang, the dollar, not the rupee, was the recognised standard of value. Writing of this Island Kelly says in his *Universal Cambist* of 1825:—"Accounts are kept in Spanish dollars, copangs and pice, 10 pice make a copang and 10 copangs one Spanish dollar. The current pice are coined in the Island. They are pieces of tin, 16 of which weigh a catty or 1½ lb. English. On the exchange of dollars into pice there is a loss of 2%.

p. 383. The Currency of the Straits Settlements is thus described in Low's *Dissertation on Penang, etc., in 1836*:—"The dollar is the favourite coin in the Straits. It exchanges in the bazaars for a number varying from 100 up to 120 pice. At present it is pretty steady at 106.⁷² Indian rupees are also in circulation, but gold coins are hardly ever seen. There are also half dollars, and the divisions of the *sicca* [Government] rupee. A *sicca* rupee exchanges in the bazaar for 50 pice on an average" [*i. e.*, at par as a half dollar]. And similarly Newbold in his *Account of the British Settlements in the Straits of Malacca, 1839*, (says) . . . "The most current copper coins are the cent, half and quarter cent, the *doit*, the *wang*, the *wang dhara* [*baharu*], and the Indian pice."

⁷⁰ The total is really 1024 dollars 60 cents including "factorage"

⁷¹ This gives the ratio of tin to silver as 34 : 1. See next note.

⁷² The nominal local ratio of tin to silver was 10½ : 1 to 10 : 1. The actual ratio as shown by comparative weighments of tin money and its silver equivalents (*ante*, p. 13) was 7½ : 1. The statements here show ratios of 5½, 5½, 6½ and 5 : 1; no doubt all due to local variations in the value of tin as stated in terms of silver money.

pp. 383-4. In 1835 the Company revised its currency legislation for the whole of its territories, which included the Straits Settlements, and made no exception in favour of the dollar-using colony when enforcing the establishment of the rupee as the standard coin, with pice as subsidiary circulation. The first concession which the Company made to the requirements of the Straits currency was in 1847, when by Act No. VI, of that year it was provided that the Indian Regulations shall not apply to copper currency of the Settlements of Penang, Singapore and Malacca . . . But this concession was withdrawn in 1855. The preamble of Act XVII of that year reads as follows:—Whereas the Company's rupee is by Act XVII of 1835 a legal tender in the Settlements of Prince of Wales Island (Penang), Singapore and Malacca, but no copper coin except the half-pice issued under Act XI of 1854 is now legal tender of fractions of a rupee in that Settlement . . . it was enacted as follows from the 1st July 1855:—

A pice (cash) should be the legal

tender in the Straits as	420	to the dollar
A half-pice	280	
A pice ⁷³	140	
A double pice	70	

p. 383. (In 1863) Sir Hercules Robinson exposed the absurdities of the existing regulations:—All accounts throughout the Straits Settlements, except those of the Government, are kept in dollars and cents, but the smaller accounts are kept in the denomination of rupees, annas and pices, causing thereby much needless labour and confusion in the financial department.

p. 386. (On the transfer of the Colony from the Indian to the Imperial Government in 1867), the new local Legislation . . . under date 1st April 1867 passed the Legal Tender Act of 1867, repealing all laws for making Indian coin legal tender, and declaring that from 1st April "the dollar . . . shall be the only legal tender in payment or on account of any engagement whatever, except as hereinafter mentioned (i. e., as to subsidiary silver coins) . . . The Act goes on to place limits of tender of . . . such copper or bronze coins as may be issued by Her Majesty's Mint or any branch thereof, representing the cent or one hundredth part, the half-cent or two hundredth part or the quarter-cent or four hundredth part of the dollar . . . Footnote. The rate at which the conversion of the old into the new currency was to be effected was 220 rupees per 100 dollars.

VIII.

Histoire de la navigation aux Indes Orientales par les Hollandois.

Par G. M. A. W. L. [Lodewijckx Willen].

Amsterdam, 1609.⁷⁴ [Translated.]

[Book I. relates to the First Dutch Voyage, 1595-7] fol. 306. The Chinese live only at Bantam . . . Those who live at Bantam are those who buy pepper of the villagers . . . storing it until the Chinese ships arrive, when they sell it at two sacks for a *catti*, that is, 100,000 caras [cash], for which they have bought eight sacks or more . . . Eight or ten of these ships come every year in January. . . . They bring the coin which has currency over all the Island of Java and the neighbouring Islands; it is called *cas* in the Malay language and *pinis* in Java. It is less than a *denier*,⁷⁵ and of very bad alloy, being cast in a mould. It is of lead mixed with the copper dross,⁷⁶ and therefore so fragile that when a string

⁷³ Ratio of tin to silver 45 : 1.

⁷⁴ These extracts contain the first report of the currency in the Malay Archipelago made to the Dutch. The French in which the account is written is quaint and difficult.

⁷⁵ At that time 240 *denier* went to the *livre* (quarter dollar)=960 to the dollar.

⁷⁶ The text has: "de plomb mélé d'escume de cuivre" [? sino].

of them is dropped, eight, ten, twelve, or more are broken. Also if they are soaked for a single night in salt water, they stick together so firmly that half of them are broken.

This coin is cast in a mould in China, at the town of Chinchou,⁷⁷ situated in twenty-five degrees North Latitude, and they first began to take it there in 1590, at which date it was first cast in a mould by order of King Hammion, the present ruler, because the King, who was his predecessor, named Wontai, seeing that the *cazas* which had been made for the preceding twenty years by King Hoyjen had, to a large extent, filled the islands;⁷⁸ for they have no currency in China, where everything is bought and sold by little pieces of silver which they weigh by the *conduri* [candareen]. These are little red beans (*fasiols*), having a black spot on one side, called in Latin *ærus*.

Fol. 31a. The Chinese merchants bringing them [cash] from China in such a great quantity and being able to pass them, invented this nasty little coin,⁷⁹ in order that by the use and handling thereof, they might break them and use them up. Considering this, that King had them made of an even worse quality, and strung them by a square hole in the middle, 200 together. This they call a *satac* and they are of the value of 3 *liards* of our money. Five *satac* fastened together make 1000 *cazas* which they call *sapocou*: 12,000-18,000 *cazas* are bought for a *real* of 8 [dollar].⁸⁰ Few of the first *cazas* are found because they are nearly all used up, and in Java they are no longer current. When they were first introduced, six sacks of pepper were bought for 10,000, where now, on the arrival of the Chinese, they buy only two or occasionally 2½ sacks for 100,000 *cazas* of the present currency . . .

Now, because we have spoken of the weight *conduri*, it should be noted that a large number of *reals* of 8 [dollars] are taken to China, which will not pass because no coin is current there. But they cut them into little pieces, weighed by the above mentioned *conduri*, ten of which make a [gold] *mas*, and 10 *mas* make a *toyel*, which is as much as 12 ordinary *reals* [of silver].⁸¹

IX.

Anonymous: Collection of Voyages undertaken by the Dutch East India Company. Translated into English [really paraphrased and extended from several authorities of all dates]. London, 1703.

p. 137. Waiting for the payment of pieces of eight for *cazas*, which the Dutch had, bought of them. These *cazas* are a kind of money of worse alloy than lead, of which they string 200 together and call⁸² it *una sauta de cazas* and *cazas*.

⁷⁷ ? Cachao in Tonquin. See Crawford, *Embassy to Siam and Cochín China*, 1828, p. 517.

⁷⁸ This information and "history" is of course only what the Dutch were told locally.

⁷⁹ Cf. Crawford, *Embassy to Siam and Cochín China*, 1828 p. 243. "(At Hué) he brought . . . 30 quans in money. About 15 Sp. dollars in a miserable coin composed of zinc."

⁸⁰ Malay, *sa-takok*, a knot on a string: *sa-pêku*, *sa-paku*, a string of cash: Yule, *Hobson-Jobson*, s. v. *sapèque*: Crawford, *Malay-Dict.*, s. v. *paku* (—Cantonese *pak*, a string of cash). *Liard* was an old French copper coin, worth apparently about an English penny on the above statement.

5 *sa-takok*—1 *sa-pêku*

c. 12½ *sa-pêku*—1 dollar ∴ 1 *sa-pêku*—8 cents

3 *liard*—5 *sa-takok* ∴ 1 *liard*—1½

1 cent—1 penny ∴ 1 *liard*—1

The close connection of this scale with the sub-divisions of the tin ingot currency of the Malay Peninsula will have become by now clear to the reader.

⁸¹ All this is copied by Mandelstam without acknowledgment in the fashion of his time in *Voyages and Travels to the E. Indies*, 1680-40, in Davies' trans. 1699, pp. 117ff. It is also used in a *Collection of Voyages of the Dutch E. I. Co.*, 1703, pp. 198 f.

⁸² I. e., the Portuguese so call it. *Una sauta de cazas* comes from Portuguese information and would mean a "string" (*sa-suta*, one string or file) of cash. In the work quoted *sauta* is misprinted *santa* and *sapocou* (*sa-pêku*) is misprinted *sapocou*.

p. 169. Though 140,000 *casas*, which is six score pieces of eight, were offered to make him [a Dutchman] prisoner and deliver him to the Portuguese: [1166½ to the dollar].

p. 233. The small *casas* are not current money in Bali, but only the great ones, 6,000 of which are worth a piece of eight.

X.

John Crawford. Journal of an Embassy to the Courts of Siam and Cochin China, 1828.

p. 517. The proper coined money of Tonquin and Cochin China is called a *sapek* or *sapeque*, and formerly consisted of brass, but at present of zinc. It is about the size of an English shilling, bears the King's name in the Chinese character and has a square hole in the middle for the convenience of being strung. 60 *sapeks* make a *mas*, and 10 *mas* one *kwan* or *quan* [dollar] as it is more usually written. The two last are moneys of account: 600 *sapeks*, which make a *kwan*, are commonly strung upon a filament of ratan and in this manner kept for use, forming a bulky and most inconvenient currency. Ingots of gold and silver, stamped by the Government are current in the Country, although not considered coin . . . the zinc coin, as well as the gold and silver ingots are struck at Cachao, the capital of Tongking. The punishment of death is inflicted for forging the former. The Sp. dollar is current in Cochin China and valued at one *quan* and a half by the Government. The *kwan* of account according to the statement now given ought to be worth 55 cents or something more than half a Sp. dollar, but its price fluctuates with the plenty or scarcity of silver, as may naturally be expected. The price paid by the King for the metal, from which the zinc currency is struck, is only 12 *quans* the *picul*: so that of course it passes for infinitely more than its intrinsic value, and is therefore an object of considerable revenue.⁸³

XI.

Bevington: Kingdom and People of Siam in 1855-1857.

Vol. II., p. 34. [Cambodia—The King sent us] 80 *chu-chu*. This is the currency of the country and a very inconvenient one it is. The only coin current in Cambodia besides . . . is the *petis*. This is made of an alloy of zinc and tin, very thin, and so brittle as to be easily broken between the fingers. It has Chinese characters on one side and a square hole in the middle, for the purpose of being strung on a cord like Chinese cash. The coin itself is Cochin-Chinese, but is current over a great extent of country, including Cochin-China, Tongking, Laos, Champs and Combodia. . . .

60 petis	make	1 tean
10 tean	"	1 chuchu ⁸⁴
7 chuchu	"	1 Sp. dollar

4200 petis to the dollar.

Ten *chuchu* are generally tied together in a bundle for convenience of carriage: the weight of the bundle is enormous, four of them weighing a *picul*. We received from the King 3 bundles—their equivalent value being equal in Straits money to the magnificent sum of 4 dollars and 28 cents or thereabouts. It certainly looked a great deal, and was just about as much as a man could carry.

(To be continued.)

⁸³ This gives a scale 60 sapek = 1 mas
10 mas = 1 kwan

600 sapek (cash) to the kwan.

Government reckoning, 400 cash to the dollar: actual relative value, 1200 cash to the dollar.

⁸⁴ This exactly tallies with Cochin-China scale reported by Crawford, *supra*. No. I. Chuchuk, Malay, a string, file [of pierced cash].

KING CHANDRA OF THE MEHARAULI IRON PILLAR INSCRIPTION.

BY M. M. HARAPRASAD SHASTRI, M. A., C. I. E.; CALCUTTA.

THE Mehārauli posthumous iron pillar inscription gives the following historical information :—

Chandra, an independent ruler conquered Bengal, crossed the seven tributaries of the Indus, and brought Balkh within his sway. The southern boundaries of his dominions were washed by the waves of the southern seas. He was a worshipper of Vishnu and he erected a flag-staff in honour of that deity.

The inscription gives no information about his capital, his parentage and his time, but as the characters in which it is incised belong to the early Gupta variety of Indian alphabet, he may have flourished in the first century of the Gupta era.

The inscription does not give his surname. Any surname may be given to him. Babu Nagendra Nath Vasu gave him the surname Varman, and Mr. Vincent Smith, the surname Gupta. Mr. Vasu's paper appeared in the *Proceedings of the Asiatic Society of Bengal*, for 1895, pages 177 to 180, and Mr. Smith's in the *J. R. A. S.* for 1897, pages 1 to 18. Mr. Vasu bases his theory on the Susunā inscription of Chandravarman which he read from an imperfect impression as follows :—

Pushkarāmbudhipater Mahārāja-Sri-Siddhavarmanāṣṭh putrasya Mahārāja-Sri-Chandravarmanāṣṭh kritih. Chakrasvāminah Dāśagrāntīrīṣṭhah.

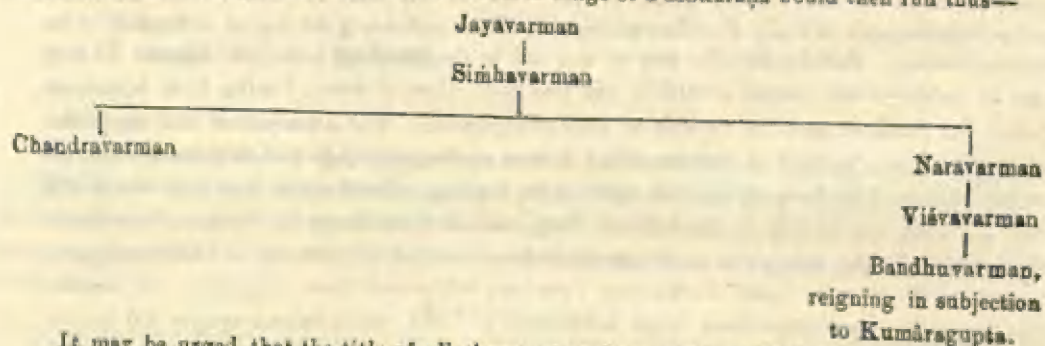
Mr. Smith bases his theory on the fact that at that period there was no great king who could conquer Bengal and Balkh at the same time, and on the fact that the inscription belongs to the north eastern variety of Gupta character. Mr. Vasu says that this Chandravarman is identical with the Chandravarman who was defeated along with other potentates of Āryāvarta by Samudragupta. Mr. Smith says that that may be true, but he cannot be the Chandra of the Iron Pillar, as he is simply styled *mahārājā* which means a subordinate position. Mr. Vasu says if this Chandra could conquer Bengal from the Pushkara Lake, how can he be a small king? Mr. Smith replies that Pushkarāmbudhi must be some place in Bengal or Assam, and not the Pushkara Lake.

I believe, I have stated the position of the two scholars on this point as far as a third person can do. But some facts have since then come to light which have strengthened the position of Mr. Vasu.

Mr. R. D. Banerji very kindly sent me a good impression of the Susunā inscription. This impression improves the reading given by Mr. Vasu in one point at least. What he reads *Pushkarāmbudhipater* is really *Pushkarāṇḍhipater*. This makes a good deal of difference in its historical bearing. *Pushkarāmbudhi* may or may not be the Pushkara Lake near Ajmer. It may appear to matter-of-fact people absurd to call that small sheet of water, 7 miles from Ajmer, an *ambudhi*, but Sanskrit poets are capable of such exaggeration. The latter part of the compound word may lead men to think of the sea, which is close to Bengal though not to Assam. But all these speculations have been set at rest by the new reading. Pushkarāṇḍ is a city which still exists. It is the second city in the Jodhpur State, and now stands on the border of the great sandy desert.¹ In the map given by Mr. Smith in his history of the conquest of Samudragupta, vast tracts of the country round Pushkarāṇḍ have been left outside these conquests. So even he admits that there were independent kings in this part of India which Samudragupta did not or could not conquer. There is nothing to prevent the supposition that Chandravarman king of Pushkarāṇḍ conquered or raided the greater portion of Āryāvarta and even Balkh but that Samudragupta sent him away from Āryāvarta, but could not conquer his home provinces in Western India; and I believe this is the right supposition.

¹ Its antiquity is vouched by the fact that an influential body of Brāhmins in Western India go by the name of the city.

Another fact has also come to light which confirms Mr. Vasu's theory. Babu Jaya Sankar, Vakil, Mandasor, has some property close to the city. While he was cultivating one of the fields, his men turned up a stone which contained an inscription. It was immediately taken possession of and kept in the house of the Subbah of the Province. In October last I saw the stone and read it. But as my stay there was short, I was not quite satisfied with my reading. Babu Jaya Sankar very kindly gave me two impressions which he had taken on very thin paper. But as I wanted to be quite sure, I applied to Dr. Marshall, Director-General of Archaeology in India, and at his instance Mr. D. R. Bhandarkar has sent me an excellent impression. This stone contains only half the inscription. It breaks up in the middle of a sentence. But the portion that remains gives us a good deal of historical information. It was incised in the year 461 of the Málava era, that is, 404 A. D., and it gives us a line of kings in Western India, *viz.* Jayavarman, his son Simhavarman, and his son Naravarman, who was reigning in 404 A. D. Now, this Naravarman is known to us from the Gaṅgdhâr inscription, dated 426 A. D., of Viśvavarman, who was his son. Referring to the new impression of the Susuniâ inscription given to me by Mr. R. D. Banerji, I find that what Mr. Vasu read Siddhavarman is really Simhavarman, written exactly in the same way as the Simhavarman in the inscription discovered by Mr. Jaya Sankar. In the Susuniâ inscription then, Simhavarman is the father of Chandravarman, and in the Mandasor inscription of 404 A. D. he is the father of Naravarman. May not Chandravarman and Naravarman be brothers? They both hail from western India, they both have the surname Varman, and the name of their father is also the same. They also come near to each other in time,—Naravarman in 404 A. D. and Chandravarman in Samudragupta's time, which Mr. Smith puts down from 345-386. But as his successor's earliest inscription is dated in Gupta Samvat 82, that is, 401 A. D., his reign may have come down to a few years later than 380 A. D. Mr. Smith is wrong, I believe, in including Mandasor in the map of Samudragupta's conquests. For Naravarman and his son Viśvavarman do not seem to have acknowledged any obligation to the Guptas. The only inscription from Western Malwa in which a Gupta name appears is that of Bandhavarman (436 A. D.), son of Viśvavarman, in which Kumâragupta's name is given first and then that of Bandhavarman, who is again extolled for his many good qualities, showing that the subjection was not very hard. The line of Varman kings of Pushkarapa would then run thus—



It may be urged that the title of all these monarchs, namely *mahārāja* shows a subordinate position. But is it a fact that *mahārāja* always meant a subordinate position? To whom would Mahārāja Jayavarman be a subordinate? Naravarman's grandfather must have lived in 350 A. D. or thereabout. There was no big empire at that time in India, and, by the showing of Mr. Vincent Smith's map, Pokarapa was never included in Samudragupta's conquests, and yet Simhavarman of Pokarapa is styled a *mahārāja*.

Mr. Vincent Smith may say that as it is not probable that a Mahārājā of Pokarṇa should invade distant Bengal, there must have been some Pushkara or Pushkarāṇa in Bengal or Assam. But then the burden of proving lies on him. Pushkarṇa is a well-known place. The Susunīā inscription agrees in character with the Mandasor inscription of A. D. 404. The compound letter *m* and *h* are exactly alike in both. They are records within a few decades of each other. So unless the contrary is clearly shown, people have a right to believe that a Mahārājā of Pokarṇa did invade Bengal. It may be argued that while Chandragupta I. and Samudragupta were powerful monarchs and were extending their dominions on all sides from the capital at Pāṭaliputra: how could a king, however powerful, of Pokarṇa, conquer Bengal? But the Susunīā inscription says that Chandravarman of Pokarṇa did conquer that part of the country and erect the wheel there; so in spite of Chandragupta and Samudragupta he did come there and conquer.

This may be possible only if it is considered that Chandravarman came to Bengal before the victorious career of Samudragupta began. In fact, Samudragupta, in establishing his dominions in Āryāvarta, had to conquer Chandravarman. In ancient India and even in modern India powerful kings often had dominions distant from their home provinces. Duryodhana had Aṅga as one of his provinces, though in the intermediate space there were other independent sovereigns. The feudatory states of the present day often have possessions detached from their main possession. Shivaji had Tanjore far away from Poona. Similarly Chandravarman might have possessions in Bengal.

It is much easier to believe that a Mahārājā of Pokarṇa would invade or lead an army to Balkh than to think that a Mahārājā of Pāṭaliputra would invade that country. The distance between Pāṭaliputra and Balkh is certainly much greater than the distance between Pokarṇa and Balkh or Pokarṇa and Bengal.²

The argument from palaeography, though very powerful when centuries are concerned, is of very little force for shorter periods. That the iron pillar inscription is written in eastern variety of Gupta character does not show that the inscription necessarily belongs to a Gupta emperor. The man who inscribed the inscription may have known only the eastern variety of character. The last argument of Mr. Vincent Smith is now given in his own words:—

"When to all these arguments is added this, that it is impossible to indicate any other sovereign of the period to whom the language could be applied the conclusion is inevitable that the Chandra who set up the iron pillar was beyond doubt Chandragupta II."

The inevitable conclusion depends upon one assumption that it is impossible to indicate any other sovereign. But, with Śiṃhavarman close by at Pokarṇa, having complete mastery of western India including western and even central Malwa, where is the impossibility of indicating another sovereign?

Mr. Smith admits that the wording of the iron pillar inscription departs widely from the ordinary formula of the Gupta inscriptions, and yet he is convinced that the mysterious emperor can be no other than Chandragupta II. But others are not so convinced, and the probability of the mysterious emperor being Chandravarman is now all the greater for the new reading of Pushkarāṇa for Pushkara in the Susunīā record and the discovery of the new Mandasor inscription of 404 A. D.

² The Susunīā inscription has the figure of a wheel before it. The wheel is pretty large and is complete with spokes, nave and rim. The inscription is meant to record the dedication of the wheel to Viṣṇu. The iron pillar inscription records the dedication of a flagstaff to Viṣṇu. Both these are likely to be the work of one devoted follower of Viṣṇu. This is another argument in favour of the Chandra of iron-pillar being Chandra Varma. Because the wheel and flagstaff are both sacred to Viṣṇu and one who erects a wheel is likely to erect a flagstaff also. I think the same donor dedicated other signs also sacred to Viṣṇu and some of them may yet be discovered.

MUKTAGIRI.¹

BY HIRA LAL, B. A.; NAGPUR.

MUKTAGIRI or Salvation Hill is what is called a *siddha-kshetra* of Jainas, whence 3½ crores (35 millions) of Jaina devotees are said to have obtained *nirvāṇa* or salvation. Its old name is said to have been Medhagiri or Sheep Hill, because a sheep happened to fall from its top, but attained salvation owing to the sanctity of the place. It is referred to as Medhigiri in the Jaina book *Nirvāṇa-bhakti*, in which the following *gāthā* occurs :—

*Achchalapura vara piyade
lednai bhāya Medhigiri sihare
Ahuṣṭhaya kodio nirvāṇa.
gayā namo tesū.*

"To the north-east of Achchalapura lies Medhigiri Hill (whence) 3½ crores' attained-nirvāṇa. I bow down to it."

Achchalapura is the old name of Ellichpur, to the north-east of which lies Muktagiri, at a distance of about six miles. It is included in the Betul district of the Central Provinces and is fifty-seven miles from Badnūr, the head-quarters of the district. The hill is included within the village of Thaporā, and is about a mile away from the *basti*. It is reached by a country road, passing between two mountains rising high on either side, and presenting a most picturesque view to the passer by. These two hills, which are parts of the Satpudā range, meet at the point which was selected by the Jainas as their sacred place, where as many as 48 temples have been constructed, containing 85 idols of the various Tirthaṅkaras, the principal one being Pārśvanātha. Below the hill there is a new temple built in which twenty-five idols are enshrined, some being new and others being those of old temples on the hill, now brought down below. The dates on these range from 1488 to 1893 A. D. The hill has two principal groups of temples, one at the highest point, containing four temples, which enshrine only the twenty-four pairs of *charanas*, or footmarks of the Tirthaṅkaras or Jaina incarnations. As a matter of fact, however, there are 26 pairs instead of 24. The main group of temples is at the middle of the hill, and has a temple cut out from the rock. It is not exactly in the cave style, the roof being ornamented with artificial arches. The central and the largest temple is that of Pārśvanātha with a golden pinnacle on its top. The image inside is canopied with seven snake-hoods, one of which, the local tradition goes, was broken with a stick by Aurangzeb, whereupon a stream of blood shot forth, which restrained the iconoclast from making further injuries to the idol. It is believed that until recently the blood mark was visible on the broken hood, but somehow or other it has now disappeared. The temple was apparently roofed, but a brick dome, as in almost all other temples, has been erected over it, fully on the Muhammadan style. To the west of this temple there are three temples made of stone. One has a small portico supported on four pillars, two of which belong to an old temple, which seems to have fallen down. The carvings on these pillars are beautifully executed, especially the one which occupies the south-west corner. It is ornamented with *kirtimukhas* and with carvings of bells suspended with chains, as also Jinas in standing and sitting postures. Inside the temple, of which this forms the portico, there are broken pieces of pillars and *śikhara*, which indicate the existence of an older temple here.

On a still higher level to the west of this temple is another old temple, which has an underground terrace. This is rather in a decayed state, and has had to be supported by

¹ Visited on 18-3-10.

² The word is *kodī*, which is taken as a corruption of *koṭi*; but the more reasonable version would be to take it in its ordinary sense of a score. It is very possible that 70 saints obtained nirvāṇa from this hill.

buttresses in several places. At the entrance on the top there is an exquisite carved image of a Jaina Tirthaṅkara. Thus there are really 5 old temples, which may claim to have been built during mediæval Brahmanic period, or prior to the 18th century A. D.

Most of the images placed in this group of temples are made of black or white marble, but there are others made of ordinary red stone. Most of the marble stones are dated, and go as far back as 1483 A. D. They are much finer in sculpture than the red ones, which are locally believed to be older than the marble ones. It is very possible that the red ones are older and were made by local sculptors, who apparently were rude workers.

Besides the temples, there are spacious *dharmaśāḍis*, or rest-houses for the pilgrims, and there are also underground temples, where everything is pitch dark without a lamp. Some of these underground places are said to have been covered up as being dangerous. Formerly the temples were not carefully looked after and they had decayed, but now the Jaina community is taking active interest in their conservation, and duly repairs and whitewashes them. This work was first commenced in the year 1890 by Bāpū Shāh of Ellichpur, who spent about Rs. 22,000 in doing *śrīpoddhāra* or repairs, and enshrining new images where they were missing. Now each temple contains three or four or even a larger number of images. On one temple there is a stone inscription dated Samvat 1691 and Saka 1556, or 1634 A. D., recording the names of the builder with his family. Another stone has now been inserted giving the repairer's name as Sitābāl of Amraoti. A regular staff of temple servants is now engaged to look after the temples, whose picturesqueness is well described by a party of visitors, in the Visitors' Book kept by the manager. This may well be quoted here. "This charming place, due to the charity and munificence of the Jaina community, so full of beauty and interest, perched in such commanding surroundings, wrought upon us all a sort of spell. One would well believe that the green moss-grown water-fall was fashioned, as we were told by our guide, by the fairies. The images of the gods, their expressive countenances, mysterious and brooding, with foreheads that seem to hide within themselves great thoughts, withdrawn and unspeakable, the courtyards, the temples and all their beauty, brought great enjoyment to our party³."

The Jainas believe that there is occasionally a shower of *kesar* (saffron) rain on the temples, which leaves yellow marks on them. Whether this has any connection with any kind of droppings from the numberless *dhānīkar* bees, which make numerous combs on the rocks is a matter for leisurely determination.

ON SOME NEW DATES OF PANDYA KINGS IN THE 13TH CENTURY A. D.

BY DEWAN BAHADUR L.D. SWAMIKANNU PILLAI, M.A., B.L. (MADRAS);
LL.B. (LOND.).

(Continued from p. 172.)

*Jaṭavarman Sundara Paṇḍya.

[Reign began between 29th December 1270 (See No. 584 of 1902 below) and 5th January 1271.] 1909 (680). From the west wall of the Chaṇḍikēśvara shrine in the temple of Neṇḍuṅga-a-nāthasvāmin, at Tiruneḍuṅgaḷam (Trichinopoly District). Gift of land for a lamp by Aryan Sivandakālaḷagiyaṇ of Puḍuvūr in Ārvalakūṭṭam, a sub-division of Rājendra-chōḷa-vaḷaṇāḍu.

Date.—3rd year of Jaṭavarman Sundara Paṇḍya; Rishabha; su. 11; Monday; "Pushya" [su. 11 error for su. 5]. On Monday, 22 May 1278, Rishabha su. 5 and "Pushya" ended respectively at .73 and .01 of the day.

Note.—A date wrong by 6 tithis is not a satisfactory date. It is possible, however, that *Pusam*, the Tamil equivalent in the inscription for Pushya, is a wrong reading for "*Puram*" = "*Purva Phalguni*," but though the combination of "*Purva Phalguni*" with Rishabha su. 11 is possible, such a combination did not actually occur even once on a Monday between A.D. 1200 and A.D. 1350. It occurred on days of the week, other than Monday, in A.D. 1206, 1216, 1227, 1235, 1238, 1254, 1265, &c; and on Monday, but in Mesha (not Rishabha) in 1258 and 1275. Possibly

³ H. Campbell and others.

the date intended is Monday, 4th April, A.D. 1278, when Mesha su. 11 and "Purva Phālgunī" commented; they ended next day at .33 and .70 respectively. This would be the 3rd regnal year of Jaṭ. Sund. Pāṇḍya whose reign began in 1276.

1909 (303). From the south wall of the outer *prākāra* of the Kachchhapēśvara temple at Tirukkachchūr (Chingleput District). Gift of one buffalo for a lamp.

Date.—7th year of Jaṭ. Sundara Pāṇḍya; Mina; su. 10; Sunday; "Hasta" [*Mina* error for *Rishabha*]. On Sunday 24th May 1276, Rishabha su. 10 and "Hasta" ended at .49 and .16 respectively. [Regnal year, 7th, should be 6th].

1908 (411). From the west wall of the first *prākāra* in the Viṣṇūnāthasvāmin temple at Tiruvīṇimīlalai, Tanjore District; Damaged. Seems to record a gift of land for the benefit of the *maṭhas* and minor shrines in the temple at Tiruvīṇimīlalai; mentions a certain Nārpatteṇṇāyira Piḷḷai among the Śaiva devotees.

Date.—8th year of Jaṭavarman Sundara Pāṇḍya; Dhanu; su. 8; Friday; "Rēvaṭi." On Friday, 23 Dec. 1278, Dhanu, su. 8; and "Rēvaṭi" ended at .26 and .03 respectively.

1909 (667). From the north wall of the *maṇḍapa* in front of the central shrine in the temple of Neṇḍuṅḷalanāthasvāmin, at Tiruneṇḍuṅḷalam, Trichinopoly District. Gift of land to the temple of Tiruneṇḍuṅḷa Uḍaiya Nāyanār in Vaḍagavi-nāḍu which was a sub-division of Pāṇḍya-kulapati-vaḷanāḍu.

Date.—8th year of Jaṭ. Sundara Pāṇḍya; Makara; su. 10; Wednesday; "Rōhiṇi." On Wednesday 5 Jan. 1278, Makara su. 10 ended at .36 and "Rōhiṇi" commenced, ending next day at .41.

1909 (319). From the north wall of the Vighnēśvara shrine near the tank, in the Tirukkachchūr village (Chingleput District). Gift of land in Brahmaka[ḷa]ttūr *alias* Vēṭṭaikāraṅkulattūr in Urukkaṭṭukōṭṭam, to the temple of Nārpatteṇṇāyira-viṇṇagar Emberumān at Tirukkachchūr.

Date.—8th year of Jaṭ. Sundara Pāṇḍya; Rishabha; su. 3; Thursday; "Pushya." On Thursday 26 May 1278, Rishabha su. 3 ended at .37 of day and "Pushya" commenced, ending at .27 of Friday.

1909 (305). From the south wall of the outer *prākāra* of the Kachchhapēśvara temple at Tirukkachchūr (Chingleput District). Records the gift by a temple dancing-girl, of a lamp and a brass image carrying it.

Date.—8th year of Jaṭ. Sund. Pāṇḍya; Mithuna; *śukla* Monday, "Utt. Bhāḍ." On Monday 13 June 1278, Mithuna ba. 7; and "Utt. Bhāḍ." ended at .30 and .79 respectively.

1902 (584). From the west wall of the Saundaryā-nāyaki shrine in the Kāḷśvara temple at Kāḷaiyārkōvil (Madurā District). Gift of land.

Date.—10th year of Jaṭ. Sund. Pāṇḍya; Dhanu, su. 2; Sunday; "Pushya" [*Dhanu* must be *Makara*, and *śukla* must be *śukla*]. On Sunday 28 Dec. 1281, Makara ba. 2 and "Pushya" came to end respectively at .76 and .00 of the day.

Note.—Relying on this date, I have fixed the earlier limit of the commencement of this reign as 29 Dec. 1270. The particular combination of tithi and nakshatra on a Sunday did not occur in the 10th year of reign of any of the other Sundara Pāṇḍyas and it may therefore be safely assumed that the date belongs to the present reign. If so it would belong to the 11th year, not to the 10th.

1909 (815). From the north wall of the outer *prākāra* of the Kachchhapēśvara temple at Tirukkachchūr (Chingleput District). Refers to the confiscation of the property of some rebellious and misbehaved people at Uttippākkam and registers a gift to the temple of Tirukkachchūr.

Date.—13th year of Jaṭ. Sund. Pāṇḍya. Kumbha, su. 5; Wednesday; "Āśvini." On Thursday 4 Feb. 1283, Kumbha su. 5 and "Āśvini" came to end at .20 and .39 respectively. They were both current for the greater part of Wednesday, 3rd February.

1909 (418). From the east wall of the *prākāra* in the Vyāghrapādēśvara temple at Siddhaṅgamadāṁ (S. Arcot). Records that the Śiva-Brahmanas of the temple agreed to provide for offerings in the shrine of Āḷudaiya Piḷḷaiyār, from the interest on 2000 Kāṣu presented to the temple by Arindavan-Pallavarāṣiyan in the time of Kōpperuṇṅiṇḍādeva and now placed in their hands.

Date.—13th year of Jaṭ. Sund. Pāṇḍya; Mina; su. 6; Saturday; "Rōhiṇi." On Sat. 6th March 1283, Mina. su. 6 and "Rōhini" ended at 51 and 54 respectively.

1901 (191). From the south wall of the *maṇḍapa* in front of the Āpatsahāyēśvara temple at Tennēri (Chingleput District). Gift of land.

Date.—14th year of Jaṭ. Sund. Pāṇḍya; month of Ādi; Monday; "Haata." On Monday 9th July 1285, "Haata" ended at 48 [Regnal year should be 15th, not 14th].

1909 (308). From the south wall of the outer *prākāra* of the Kacchhapēśvara temple at Tirukkachūr (Chingleput District). Gift of 3 cows for a lamp by a merchant of Madhurāntaka-Chatarvēdimāṅgalam, residing in the street Buvanamuḷudupperunderuvu, of that village.

Date.—17th year of Jaṭ. Sund. Pāṇḍya; Simha, śukla . . . "śayā", Monday; "Utt. Āsh." On Monday 6 Sep. 1288, Simha śukla *navamī* (9th tithi) ended at 22 of day and "Utt. Āsh." was current for the greater part of the day, ending at 21 next day. [Regnal year was strictly the 18th, not 17th].

N. B.—This Jaṭavarman Sundara Pāṇḍya, whose reign is attested by six regular and several fairly regular dates, noticed above, comes between Kielhorn's Jaṭ. Sund. Pāṇḍya I and his Jaṭ. Sund. Pāṇḍya II, who is really the third of that name in the present list of Pāṇḍyas of the 13th century. I would, however, not assign any numbers till we know more about the Sundara Pāṇḍyas in the latter half of the 12th and the first half of the 13th century; but simply distinguish each Pāṇḍya, whether Sundara or Vira, by the initial year of his reign. It would be interesting to know when Jaṭ. Sundara Pāṇḍya, who came to the throne on or about 29 Dec. 1270, ceased to reign. A. D. 1288 is the latest date furnished by Madras Inscriptions, while in one of the Pudukottai inscriptions I have found a 30th year for him, i. e., A. D. 1300. If Jaṭ. Sundara Pāṇḍya whose reign began in 1270 ceased to reign in or about A. D. 1300, he cannot be the parricide who murdered Mār. Kulāśekhara I, in or about A. D. 1310. Nor can the parricide be the Jaṭ. Sundara Pāṇḍya who next comes under our notice and whose reign, beginning in A. D. 1276, ended in all probability, according to the inscriptions, as well as the Muhammadan historians, about A. D. 1293.

Jaṭavarman Sundara Pāṇḍya II.

(Reign began between 13th September 1275 and 15th May 1276 on or about 25th June 1276).

1908 (414). From the Viṇāthasvāmin temple at Tiruvijimilalai (Tanjōre District) Gift of land for the recital of *tirumurai*.

Date.—9th year of Jaṭavarman Sundara Pāṇḍya; Tuḷa; ba. 7; Sunday; "Pushya." On Sunday, 21 Oct. A. D. 1285 Tuḷa. ba. 7 and "Pushya" commenced respectively at 24 and 14 of the day. They ended next day at 20 and 12 respectively.

1902 (581 A). From the west wall of the Saundaryanāyaki shrine in the Kāṭtāvara temple at Kāḷaiyārkōvil (Madura District). Gift of land.

Date.—11th year of Sundara Pāṇḍya II. Dhanu; 2nd *tīyadī*, Wednesday; "Punarvasu" = Wed. 4th Dec. 1286, on which day Dhanu. ba. 2 and "Punarvasu" ended respectively at 82 and 93 respectively.

[N. B. "Second *tīyadī*," ordinarily meaning the 2nd day of a solar month, is an unusual expression for *dvitīyā* or "2nd lunar tithi", although *tīyadī* is etymologically the same as *tīthi*].

1902 (575). From the south wall of the Kāṭtāvara temple at Kāḷaiyārkōvil (Madura District). Gift of land to the temple of Kāṇappēr by Aghōraśiva Mudaliār alias Vaidya-chakravartin. Mentions also a certain Pushpavanaśiva.

Date.—12th year of Jaṭ. Tribh. Sundara Pāṇḍya; Simha 29; ba. 3; Wednesday, "Rēvatī." On Wednesday, 27th August 1287 [which was 30 Simha, not 29 Simha], ba. 3 and "Rēvatī" ended at 73 and 37 respectively.

There is another date, very similarly worded, but referrible to a Sundara Pāṇḍya whose reign must have commenced in A. D. 1303—[See No. 580 of 1902 below].

1907 (590). From the north wall of the Tiruchuṭṭamāḷiga of Saumyanāthasvāmin temple at Nandalūr (Cuddapah). Damaged.

1909 (302). From the South wall of the outer *prākāra* of the Kachchapēśvara temple at Tiruppachchūr (Obingleput District) Tamil. Gift of 30 cows and one bull for a lamp by a native of Maṇanallūr *alias* Virāśoḷachaturvēdimangalam in Sembūr Kottam, a subdivision of Jayaṅgōḍa chōḷa-maṇḍalam.

Date.—Year opp. 13th of Jaṭavarman Tribh. Sundara Pāṇḍya; ba. 10; Monday; "Krittika" = Monday 3 July 1290 when ba. 10 in Kataka and "Krittika" ended respectively at '44 and '77 of the day.

Date.—(15th) year of Jat. Sundara Pāṇḍya; Virōdhi Saṁvat; Kumbha; su. 10; Monday, "Punarvasu." On Monday 20 Feb. 1290, which was in Virodhi Saṁvat, Kumbha su. 10 ended at '60, and Punarvasu began, ending next day at '05.

[15th year, error for 14th].

1908 (69.) From the south wall of the central shrine in the Nilakanṭhēśvara temple at Veḍāl (North Arcot District). Gift of land to the temple of Karaikkapādiśuramuḍaiya-Nāyanār at Viḍāl in Viḍār-parru *alias* Vikrama-Pāṇḍya-vaṇaṇḍu, a district of Venkunra-kōttam in Jayaṅgōḍa chōḷa-maṇḍalam.

Date.—[This date appears, without any result, positive or negative, among the dates published by Prof. Jacobi in *Ep. Ind.* XI p. 136]. 3rd year opp. 13th Kōnerimaikondan Jaṭ. Sund. Pāṇḍya. Kataka; su. 7; Wednesday; "Hasta." On Wednesday 4 July, A.D. 1291, Kataka su. 7 and "Hasta" ended at '58 and '01 respectively. (For ending moment of Nakshatra local time has also to be considered).

1904 (123). From the east wall of the *maṇḍapa* in front of the central shrine in the Sivān-kurēśvara temple at Tirthanagarī (South Arcot). Gift of land for the festival called Kodanḍa-rāmaṇ-sandī after the king.

Date.—3rd opposite 13th year of Kōnerimaikondān Sundara Pāṇḍyan; Mēsha su. 9, "Pushya" = Friday 28th March 1292, when Mesha, su. 9 and "Pushya" ended at '59 and '25 respectively.

N.B.—The inscription particularizes the date now dealt with as the 276th day of the 16th regnal year. If so, the reign would appear to have commenced on or about 25th June 1276, which is consistent with all the dates found so far for this Sundara Pāṇḍya, except Kielhorn's "P." No. 27 "year opp. 14; Monday 15th May 1290."

* Māravarman Tribhuvanachakravartī Vikrama Pāṇḍya.

(Reign began between 12th Jan. and 29 Aug. 1283).

1902 (143). From the south wall of the *prākāra* in the Rāmasvāmin temple at Bannūr (Mysore District). Sale of land.

Date.—3rd year of Māravarman Vikrama Pāṇḍya; Makara; su. 4; Friday; "Punarvasu" [Sukla 4 must be Śukla 14]. On Friday 11th Jan. 1286, Makara su. 14 and "Punarvasu" ended at '20 and '12 respectively.

1896 (120). From the north wall of the second *prākāra* in the Kanyākumari temple at Cape Comorin (Travancore State). Gift of lamp.

Date.—5th year of Māravarman Vikrama Pāṇḍya; Dhanus; śukla 8; Sunday; "Rēvatī." On Sunday 14th Dec. 1287, Dhanus śukla 8 and "Rēvatī" ended at '12 and '64 respectively.

1909 (410). From the east wall of the *prākāra* in the Vyāghrapādēśvara temple at Siddha-līngamaḍam (S. Arcot). Gift of land for offerings by the *nagarattār* of Siṅgūr.

Date.—6th year of Mar. Tribh. Vikrama Pāṇḍya; Kanni; su. 1; Sunday; "Hasta." On Sunday 29 Aug. 1288 (= 1 Kanni), Kanni su. 1 ended at '60 while "Hasta," began at '38, ending next day at '42.

[Inscriptions Nos. 53 and 54 of 1905 give this Pāṇḍya the Saka date 1209 = A.D. 1287].

1900 (116). From the north wall of the first *prākāra* of the Trivikrama-Perumāl temple at Tirukkoilūr (S. Arcot). Refers to the king's victory over the Kākaṭya king Gaṇapati and records a gift of two lamps.

Date.—8th year of Tribhuvanarājādhirāja Paramēśvara Śrī Vikrama Pāṇḍya; Dhanus; ba. 8; Friday; "Hasta." On Friday 14th Dec. 1291, Dhanus ba. 8 and "Hasta" ended at '90 and '85 respectively.

1901 (251) From the south wall of the central shrine in the Akashévara temple at Achchara-pakkam (Chingleput District). Damaged; gift of land.

Date.—3rd year of Mar. Tribh. Vikrama Pāṇḍya; ["may be 5th," says Epigraphist; but the impression which he was good enough to examine again with me, seems to be a fairly clear "3rd year"]. Mina; ba. 11; Monday; "Śravana." There is no date corresponding to the given chronological details between A.D. 1283 and A.D. 1290, but on Monday 26 Feb. 1291 (which however was in the 8th year, as in the last inscription, not in the 3rd or 5th), Mina ba. 11 ended at '51 of the day and "Śravana" commenced at '15, ending at '17 on Tuesday.

* Jajāvarman Tribh. Vikrama Pāṇḍya.

1894 (11) From the inside of the north wall of the second *prākāra* in the Sundararāja-Perumāḷ temple at Dāḍikkombu (Madura District). Incomplete.

Date.—4th year of Jajāvarman Tribhuvana-chakravarti Vikrama Pāṇḍya; Mithuna, su. 9; Thursday; "Svāti."

On this inscription the Madras Epigraphist remarks: "The characters are earlier than those of inscriptions belonging to Kielhorn's 'K,' Koneriamaikondan Vikrama Pāṇḍya, whose reign commenced in A.D. 1401. This Jajāvarman Vikrama Pāṇḍya may have been contemporaneous with Māravarman Vikrama Pāṇḍya (A. D. 1283)."

Elsewhere (Annual Report for 1910-11, p. 79) we read "In the time of Jaj. Vikrama Pāṇḍya whose exact period of rule could not be fixed at present, etc."

I find no dates that would suit the chronological details and the period assigned by the Epigraphist, except the following:—

(1) On Thursday, 30 June A.D. 1278, Mithuna su. 9 and "Svāti" ended at '59 and '54 respectively.

(2) On Thursday, 1 July, 1305, Mithuna su. 9 and "Svāti" ended at '90 and '75 respectively.

When more dates of this reign are found, a further approximation may be attempted.

* Jajāvarman Srivallabhadēva.

(Reign began between 5 Ap. and 12 Nov. 1291.)

1909 (503). From the South wall of the Parannaigāttaruḷiyasvāmin temple at Padup-pāḷaiyam (Tinnevely District). Tamil, appears to record a gift of money for a lamp; much damaged.

Date.—6th year of Srimat Srivallabhadēva; Mesha; [ba.] 11; Friday; [may also be read, says Epigraphist, as Monday]; "Uttara Bhādrapada." On Friday, 19 April A. D. 1297, ba. 11 in Mesha and "Uttara Bhādrapada" ended respectively at '11 and '87 of day.

1909 (499). From the east wall of the Veṅkaṭāchalapati-Perumāḷ temple, at Sōlapuram (Tinnevely District), right of entrance. Damaged; mentions Uttamaśōḷa-Viṇṇagar.

Date.—[9]th year of Jajāvarman Srivallabhadēva; Mesha 11; Paurṇamī; Tuesday.

The Epigraphist commented thus on this inscription: "The record is much damaged and the reading very doubtful." The value, however, of the solar day of the month, in investigating the particulars of a reign regarding which nothing was known, induced me to beg the Epigraphist to examine the impression once more in my presence. This was done; and the conclusion arrived at by us was that although the record was much damaged, there was no doubt about the words "Mesha, Paurṇamī and Servai (= Tuesday);" there remained the day of the solar month which we read as "11" but which might equally be "19" or "16". Presuming that it was "11," I arrive at the date, Tuesday 5 April A. D. 1300, which was full-moon day and 11 Mesha.

1902 (642). From the north wall of the maṇḍapa in front of the central shrine in the Pārijātavanēśvarasvāmin temple at Tirukkaḷar (Tanjore District). Sale of land to Vijaya-Gaṇḍa-gōpāla.

Date.—20th year of Jajāvarman Srivallabha; Mesha; su. 11; Saturday; "Magha." On Saturday, 3 April, A. D. 1316, "Magha" ended at '60 of the day and Mesha śukla 11 commenced on at '18, ending at '26 next day.

1902 (639). From the east wall of the *maṇḍapa* in front of the central shrine in the Mihirāruṇḍēśvara temple at Tirumiyachchūr (Tanjore District). Gift of land.

Date.—21st year of Māravarman Kulasekhara; Mithuna; śukla 12; Monday; "Svāti."

Later, the same inscription refers to Jaṭavarman Srivallabhadeva's 25th year, Vṛścika, ba. 15 [aparapakṣattu paunṇiyai, an extraordinary expression, since *paunṇami* must of course fall in *pūrva pakṣa*]; Wed.; Rōhiṇī. The date first quoted in the inscription may be referred, as is done below, to the reign of Māravarman Kulasekhara II, i. e., to A.D. 1334.

The second date may be identified with *Wednesday, 12 Nov. 1315*, when Rōhiṇī ended at '66 of day, and ba. 1 (*aparapakṣattu prathamai*) at '95 of day. Either the inscription wrongly quotes *paunṇiyai* for *prathamai* which, considering the unusually erroneous expression commented on above, is the more probable alternative or the *paunṇami* which in meantime ended at '97 of the day on *Tuesday*, was brought up to sunrise on *Wednesday* owing either to local time or to a peculiarity of local calculation. I think, however, ba. I was meant.

* Māravarman Tribh. Sundara Pāṇḍya.

(Reign began 19 Feb. and 6 Mar. A. D. 1294.)

1911 (342). From the west wall of the central shrine in the Muṇkuḍumīśvara temple at Kaḷattur (Chingleput District). Gift of land for offerings to the same temple by Kāḷkunāyakaṇ one of the Kaikkōḷars of the temple. Mentions Gaṅgaikondasōḷa-chaturvēdimāṅgalam.

Date.—14th year of Māravarman Sundara Pāṇḍya, Mēsha, su. 13; Sunday; "Chitra"—Sunday, 16 April, A.D. 1307, when Mēsha, su. 13 ended at '66 of day, while "Chitra" ended at '39 next day, having been current for the greater part of Sunday.

1911 (343). From the north wall of the central shrine in the Muṇkuḍumīśvara temple at Kaḷattur (Chingleput District). Gift of land for offerings by Āḷudaiyanāyakaṇ, another Kaikkōḷa of Muṇkuḍumīśvara temple at Kaḷattur (Chingleput District).

Date.—14th year of Māravarman Sundara Pāṇḍya; Mīna; su. 1; Monday; "Rēvati."

On Monday, 6 March A.D. 1307, Mīna su. 2 and "Rēvati" ended at '82 and '47 of the day respectively ["su. 1" error for "su. 2"].

1911 (344). From the north wall of the central shrine in the Muṇkuḍumīśvara Temple at Kaḷattur (Chingleput District). Gift of land [for offerings] by Mallāṇḍai, a third Kaikkōḷa of the same temple. The donors in Nos. 342 and 343 were his brothers.

Date.—14th year of Māravarman Sundara Pāṇḍya; Kumbha; śukla.....; Monday; Uttara-Āśāḍha.

On Monday, 19 Feb. A.D. 1308, Kumbha ba. 12, and "Uttara-Āśāḍha" ended at '89 and '17 of the day respectively [Śukla error for śaḥula].

* Jaṭavarman Vira Pāṇḍya.¹

(Reign began between 23 June and 24 July 1296.)

1900 (78). From the north wall of the first *prākāra* of the Vēdapurīśvara temple at Tiruvottūr (North Arcot District). Gift of 64 Cows and 2 Bulls.

Date.—5th year of Jaṭ. V. Pāṇḍya; Mithuna; "Hasta." On Friday 7 July A.D. 1301, su. 1 and Nak. "Pushya" (not "Hasta") ended at '56 and '23 of the day.

† 1908 (401). From the north wall of the first *prākāra* in the Viḷṇāthasvāmin temple at Tiruvilimilali (Tanjore District). Gift of land by a native of Periyāṅḍi in Tirunagaraiyārnāṇḍa a sub-division of Kulōttuṅgaśōḷa-vaḷaṇḍa.

Date.—6th year of Jaṭ. V. Pāṇḍya (no epithet); Kanni; su. 6; Friday; "Mūla." On Friday 28th Sep. A. D. 1302 which was, however, at the beginning of the 7th and near the end of the 6th year of Vira Pāṇḍya who suffered the Muhammadan invasion, Kanni su. 6 (it was the last day of Kanni) and Mūla ended at '10 and '25 of the day respectively.

¹ Since this article was sent to Press, Prof. Hermann Jacobi of Bonn University has calculated four of these dates (i. e. those marked †) relating to the reign of Jaṭ. Vira Pāṇḍya and published them in *Ep. Ind.* Vol. XI. pp. 137-139. The present results are, however, offered to the public in the form in which they originally stood first because several old dates not furnished to Prof. Jacobi, are here referred to the present reign and secondly because the findings here presented, especially that relating to the probable commencement of the reign, are not invariably those arrived at by Prof. Jacobi.

1906 (45). From the base of the verandah enclosing the central shrine in the temple of Amṛitagaṇeśvara at Tirukkaṇṇaiyūr (Tanjore District). Gift of land; mentions the 41st year (of the king's predecessor ?) and the shrine of Vikrama-Chōḷicchēnramuṇḍaiyār.

Date.—14th year of Jaṭ. Vira Pāṇḍya; (no epithet) [Dhan] ba. 10 Wed.; "Svāti";

(1) on Wednesday 22nd Dec. 1266, Dhan. ba. 10 and "Svāti" ended at '94 and '44 respectively.

(2) on Wednesday 16 Dec. 1310, Dhan. ba. 10 and "Svāti" ended at '55 and '57 respectively.

If the first of these days were the date intended, it would belong to the conqueror of "Īlam, Koṅgu and Choḷa;" but as no such conquest is explicitly referred to, we may adopt the second date which would then belong to Jaṭ. Vira Pāṇḍya whose reign began in 1296 and lasted till at least 1342. He was the only Vira Pāṇḍya who could, so far as is known to us, refer in 1310 to a predecessor with 41 years of reign, that is, to his own (natural) father, Māravarman Kuḷasekhara whose reign began in 1268, and who in 1310 was murdered by his legitimate son Sundara Pāṇḍya.

All the remaining dates of this Jaṭ. Vira Pāṇḍya refer to the 40th and subsequent years of his reign. We know from the Muhammadan historians that Sundara Pāṇḍya, after murdering his father Māravarman Kuḷasekhara in 1310, defeated his natural brother Vira Pāṇḍya but was afterwards defeated by the latter with the help of "Manar Barmal," son of the daughter of the murdered Kuḷasekhara, and fled to Delhi. Vira Pāṇḍya's success and restoration to his throne were of brief duration, because in or about 1312 he was attacked and defeated, and the city of Madurā sacked, by the Muhammadans under Malik Kafur. We are told also that eight Muhammadan Chiefs ruled over the Pāṇḍyan kingdom from 1310 till about 1358, and there is among the Pudukkottai dates a Hejra date A. H. 732 (= A.D. 1331-32). About 1340, however, the work of the reconstruction and reconsecration of the temples desecrated by the Muhammadan occupation was taken up under the auspices of Vira Pāṇḍya, who now reappears on the scene, always dating his reign from July 1296 when he seems to have been installed by his father as co-regent of the Pāṇḍyan Dominions.

† 1908 (122). From the east wall of the first *prākāra* of the Tiruttalḷṣvara temple at Tirupputtūr (Madurā District). Sale of privileges pertaining to *pāḍikkāval* by the *saḥā* of Tirupputtūr (Madurā District) to Avaiyaṇ *alias* Mālavachakravartin of Sūraiḱṇḍi.

Date.—44th year of Jaṭ. Vira Pāṇḍya; 5th Dhanu; su. 1; Thursday, "Mūla."

On Thursday, 2 Dec. 1339 (= 5 Dhanu) su. 1 and "Mūla" ended at '51 and '26 respectively.

1906 (393). From the north wall of the *śaṅḍapa* in front of the Satyagiriṇātha-Perumā temple at Tirumaiyām (Pudukkottai). Records the sale of all rights connected with *pāḍikkāval*.

Date.—4 [5th] year of Jaṭ. Tribh. Vira Pāṇḍya (no epithet); Dhanu; ba. 8; Wed. "Hasta."

On Wednesday 13 Dec. 1340, ba. 8; and "Hasta" ended at '23 and '28 respectively.

† 1908 (119). From the east wall of the first *prākāra* of the Tiruttalḷṣvara temple at Tirupputtūr (Madurā District). Records that Avaiyaṇ Periya Nāyaṇār *alias* Viśālayadēva, a native of Kuraiḱṇḍi irrigated by (the river) Tēpāru in Adaḷaiyūr-nāḍu, consecrated again the image in the temple of Tiruttalḷyāṇḍa-Nāyaṇār which had been polluted by the occupation of the Muhammadans.

Date.—46th year of Jaṭ. Tribh. Vira Pāṇḍya; 14 Kaṭaka; Monday; su. 5; "Uttara Phālguni." On Monday 12 July 1339, su. 5 and "Uttara Phālguni" ended at '22 and '006 respectively; but the day of the solar month was 15 Kaṭaka not 14th [Regnal year 46 is apparently an error for 44]. At p. 138 of *Ep. Ind.* Vol. XI, Prof. Jacobi gives 2 Aug. 1339 as the equivalent of this date; but as he agrees with me as to the day of the solar month, his "2 Aug." must be a *lapseus calami* for "12 July."

(The Epigraphist, on reading the impression again in my presence, was of opinion that the recorded year was clearly 46).

† 1908 (120). From the east wall of the first *prākāra* of the Tiruttalḷṣvara temple at Tirupputtūr (Madurā District). Records the Muhammadan occupation of the temple and its consecration by Viśālayadēva mentioned in No. 49. He was on this account given certain special privileges in the temple by the priests of the temple.

Date.—44th year of Jaṭ. Vira Pāṇḍya; 21 Mithuna; su. 12; Sund.; "Anurāḍha."

[Reference to Muhammadan occupation commented on in *Ept's. Rept.*, 1908-09, p. 82]

Sunday 16 June 1342 (= 21 Mithuna); su. 12 and "Anurāḍha" ended at '49 and '77.

[Regnal year should be 46, not 44].

(The Epigraphist read the impression again in my presence and was of opinion that the regnal year may be 46 or 49, not 44).

* **Jaṭavarman Sundara Pāṇḍya.**

(Reign began between 29 Aug. 1302 and 28 Aug. 1303).

1902 (580). From the west of the kitchen in the Kāllīvara temple at Kāḷaiyār Kōvil (Madurā District) Gift of land.

Date.—[1] year of Jaṭ. Sund. Pāṇḍya; Simha 31, ba 3; Wed. "rati nḍi." On Wed. 28 Aug. 1314 (= 31 Simha) ba. 3 and *nakṣatra* "Aśvini" (Tamil, *Aśvati*) ended at '89 and '47; respectively of the day.

Māravarman Kulasekhara II.

(Reign began between 6th and 29th March 1314.)

1902 (595). From the inner *gōpura* of the Prēmapariśvara temple at Anbil (Trichinopoly District), right of entrance. Incomplete.

Date year opp. [8rd] of Māravarman Kulasekhara II. Rishaba; 13th tithi; Wed.; "Svāti."

On Wednesday 5 May, A. D. 1316, Rishabha su. 18 and "Svāti" commenced, ending at '09 and '40 respectively on Thursday. [Regnal year should be "year opp. (2nd) not "year opp. (3rd)"].

1903 (119). From the east wall of the *maṇḍapa* in front of the central shrine in the Tilakēśvara temple at Dēvipattāgam (Madurā District). Mutilated at the beginning.

Date.—year opp. 2nd of Kulasekhara Pāṇḍya "who conquered every country;" 8th tithi; Sat.; "Rōhiṇi" On Saturday, 19 Feb. 1317, Phālguna su. 8 and "Rōhiṇi" ended at '92 and '25 respectively.

— From the outer wall, (above the *gōmukha*) of the inner *prāśāra* enclosing the *garbhagṛiha* of the Kuttalīśvara temple at Kurrālam (or Courtallam, Tinnevely District)

Date 7th (?) year of Māravarman Kulasekhara; 13 Kumbha; su. 8; Friday; day of "Rōhiṇi."

On Friday 5 Feb. A. D. 1321, which was 13 Kumbha, śukla 8 and "Rōhiṇi" ended respectively at '59 and '93 of day. The regnal year looks like "4th" in the impression but is really "7th," which fact was verified by the writer's friends at Kurrālam.

1907 (126). From the north wall of the kitchen in the Siddhajñānēśvara temple at Pāpāngulam (Tinnevely District). Sale of land to the temple of Karuttarindumūḍitta-Pāṇḍi [Sa] ramūḍaiya Nāyanār, here said to be in Sēraṅgai-Vēppāṅ-tirumaḍaiviḷāgam situated in Mullināḍu.

Date.—8th year of Māravarman Tribh. Kulasekhara "who took every country;" Tula " [1] 2"; su. 9; Wednesday; "Sravaṇa."

On Wednesday 30 Sep. 1321 (= 2 Tula), su. 9 and "Sravaṇa" ended at '72 and '97 respectively.

The reading *12 Tula*, which I believe to be an error for *2 Tula*, gives rise to the following observations:—The epithet "who took every country" may seem to relegate this date to the reign of Mār. Kulasekhara I. The interval between the initial years of the two Kulasekharas being 46 years, it follows that lunar *tithis* and *nakṣatras* are likely to occur at the same time of the solar year in either reign. (*Vide* *loc.* 228 of my *Indian Chronology*.) Moreover, if a *tithi* falls this year on 2nd Tula, it must have fallen last year on or about 12th Tula, so that *per se* a particular *tithi* and *nakṣatra*, due on the 2nd Tula this year, would, ordinarily, have occurred 47 years ago on 12th Tula. Nevertheless, no suitable date, satisfying all the chronological details in the inscription, has been found in the reign of Mār. Kulasekhara I. except A. D. 1274, which however, was only the 7th year of that reign (not the 8th). On Wednesday 10th October A. D. 1274 (= 13 Tula, not 12 Tula) Tula su. 9 commenced at '08 of the day, ending next day at '14, while *nakṣatra* Sravaṇa ended at '55 on Wednesday.

N. B.—This inscription is on the north wall of a temple kitchen, while the next, No. 125, is on the west wall.

1907 (125). From the west wall of the kitchen in the Siddhajnānēśvara temple at Pāpāngulam (Tinnevely). Sale of land to the temple of Karutt-arindu-muḍitta Pāṇḍi [Sa] ramuḍaiya Nayanār.

Date.—8th year of Māravarman . . . Tribh. Kulasekhara; Dhanu 11; ba . . . ; Tuesday, "Svāti."

On Tuesday 15th December 1321 (= 19 Dhanu) ba. 10 ended at '13 and "Svāti" at '24 of the day.

[The inked impression of the inscription was read again in my presence by the Epigraphist, and the conclusion come to by him was that the solar day of the month could be read either as "11" or as "19." The latter reading suits the other chronological details which are clear.]

1907 (149). From the south wall of the shrine of the goddess in the Siva temple at Pūvālaikkuḍi (Pudukkoṭai State). Gift of the village of Pūvālaikkuḍi. Mentions the festival called Maramāṇikkag-sandi and a certain Sōlai-Kalyilāyamuḍaiyaṇ *alias* Kalikaḍinda Pāṇḍiyadēvar. The temple is called Uḍaiyār Tiruppūvālaikkuḍi-uḍaiya-Nāyanār in Vaḍaparrunāḍu including Sevvalūr, a sub-division of Kūḍalūr-nāḍu, a district of Ten-kōpāḍu.

Date.—16th year of Mār. Kulasekhara "who took every country;" Vṛiśchika; su. 5; Wednesday, "Rēvatī."

On Thursday, 25 January, 1330, Kumbha [not Vṛiśchika], su. 5 and Rēvatī ended at '20 and '18 respectively; in other words they were current for the greater part of Wednesday, 24 January, on which they commenced at '10 and '07 respectively [Vṛiśchika, error for Kumbha].

[The Epigraphist, at p. 78 of his Annual Report for 1907-08, identifies this prince with Mār. Kulasekhara I, but the date does not suit the 16th regnal year of that reign].

On Wednesday, 3 Nov. 1283, Vṛiśchika, su. 12 (not *śukla* 5) and Rēvatī ended at '71 and '71 respectively.

On Wednesday, 31 Oct. 1286, Vṛiśchika, su. 12 (not *śukla* 5) and "Rēvatī" ended at '66 and '96 respectively.

These dates would answer for the 16th and 19th years of Māravarman Kulasekhara I (16 and 19 being easily confounded in Tamil writing with each other); but *śukla* 5 for *śukla* 12 is not an error so readily accounted for as Vṛiśchika for Kumbha.

* Jaṭavarman Tribh. Parākrama Pāṇḍya.

(Reign began between 15 April and 10 August 1315.)

1906 (395). From the west wall of the *maṇḍapa* in front of the Satyagirinātha-Perumāḷ temple at Tirumaiyam (Pudukkoṭai State). Incomplete. Sale of land for marriage expenses.

Date.—5th year opp. 7th of Jaṭ. Tribh. Parākrama Pāṇḍya; Kumbha; ba. 12; Sunday; "Uttara Āshāḍha." On Monday 11 Feb. A. D. 1325, Kumbha ba. 12 and "Uttara Āshāḍha" ended at '22 and '11 respectively. In other words, ba. 12 and "Utt. Āsh." were current for the greater part of Sunday, 10 Feb. 1325. [Regnal year should be 10th not 12th].

1894 (17). From the east wall of the *maṇḍapa* in front of the Pushpavanēśvara shrine at Tiruppūvaṇam (Madura District). Gift of land.

Date.—(Wrongly assigned in App. to Annual Report for 1894-95 to Konerinmaikondan's 8th year) 9th year of Parākrama Pāṇḍya; Simha su. 8; Wednesday, "Anurāḍha." On Wednesday 10 Aug. A. D. 1323, Simha su. 8 and "Anurāḍha" ended at '48 and '45 respectively.

* Tribh. Kulasekharadēva.

[23 July A. D. 1166 fell in his 5th year. This must have been the Kulasekhara who waged a prolonged war against Parākramabāhu of Ceylon. Tiruputtūr is one of the places mentioned in the *Mahāvamsa* as having been visited by Lanakāpura, the Ceylonese General.]

1908 (101). From the Tiruttalēvara temple at Tiruputtūr (Madura District.)

Date.—Year opposite the 4th of Tribh. Kulasekharadēva, "27th day of Karkataka "Rohiṇi;" Saturday. In *Ep. Ind.* Vol. XI, at p. 137 the Epigraphist notes that the date of the inscription, as judged by the characters, must be earlier than A. D. 1200. I find that the date was Sat. 23 July A. D. 1166 which was the 27th day of Karkataka. On this day "Rohiṇi" and Srāvapa ba. 10 ended at '70 and '87 of the day respectively.

THE INDIAN INSCRIPTIONS AND THE ANTIQUITY OF INDIAN
ARTIFICIAL POETRY.

By G. BÜHLER.

[Translated by Prof. V. S. Ghate, M. A.; Poona.]

(Continued from p. 193.)

V. The Nāsik-Inscription No. 19, from the nineteenth year of Siri-Puṣumāyi.

A further contribution to the knowledge of the *Kāvya* style of the second century and especially of the poetic ideas and comparisons in vogue at the time is made by the *praiśasti* of a cave which was given over to the monks of the Bhadrāyāniya school, in the nineteenth year of the reign of the Andhra king Siri-Puṣumāyi. The date of the inscription can be only approximately determined at present. Nevertheless it must be somewhat older than the Girnār *praiśasti* discussed above. Siri-Puṣumāyi like Chashtana is, as we know, mentioned by Ptolemæus, under the name of Siro-Polemaios or Siri-Polemios, as the ruler of Baithana, i. e., Paṭṭhāna or Pratiśbhāna on the Godāvari river. Accordingly the inscription in question will have to be placed somewhere about the middle of the second century. To the same result leads another circumstance which is put forth by Dr. Bhāṭ Dāji in *Journ. Bo. Br. Roy. As. Soc.*, Vol. VIII, p. 242. According to l. 6 of our inscription, Puṣumāyi's father Gotamiputa Sātakaṇi extinguished the family of Khakharāta. In the inscriptions of Nāsik,⁸⁰ Junnar, and Karle is mentioned a Kshaharāta king and satrap or great satrap Nahapāna, whose son-in-law, the Saka Ushavadāta or Usabhadāta was a great patron of Brāhmins and Buddhists and made many grants in the western Deccan, as well as in Konkan and Kāthiāwād, and we are provided with the several dates of his reign, from the year 40 to 46. The similarity of the names Khakharāta and Kshaharāta makes it very probable that they denote one and the same person, a supposition which is also favoured by the circumstance that just the very districts, in which Ushavadāta made his grants, have been mentioned in l. 2 f. of our inscription as parts of Sātakaṇi's dominion.⁸¹ The title satrap or great satrap borne by Nahapāna leads to the further conclusion that he was a dependent prince and the fact that on his coins, the Kharoshṭri *lipi* is used side by side with the southern alphabet, proves his connection with the north-west where the Indo-Scythians were rulers. We may, therefore, suppose that he, like Rudradāman, used the Saka era, and thus his last date, Samvat 46, would correspond to A.D. 124/5. Very probably his unfortunate war with Sātakaṇi took place soon after this year. According to his inscriptions,⁸² Sātakaṇi ruled for at least 24 years, and extinguished the Kshaharāta king and satrap before the eighteenth year of his reign. For, the Nāsik inscription No. 13, bearing this year, disposes of a village in the district of Govardhana,⁸³ which had in earlier times belonged to the dominion of Nahapāna. If then we assume that the battle between Nahapāna and Sātakaṇi took place in the year 47 of the Saka era used by the former, i. e., in A.D. 125/6, and in the fifteenth year of the reign of the latter, then the year of the writing of our inscription would be A.D. 153/4, by adding the 9 years of Sātakaṇi and the 19 years of Puṣumāyi to 125. Of course it is possible that the date in question may be from ten to twelve years earlier or a very few years later even. A later date than this does not seem to be probable, because the mention of Puṣumāyi's name in Ptolemæus shows that he must have been on the throne a long time before A.D. 151, the date of the completion of the Geography.⁸⁴

If we accept these conjectures which at least possess a very high probability, then our inscription is about twenty years older than the *praiśasti* of the Sudarāna Lake; and its style must be regarded as a proof for the growth of *kāvya* in the middle of the second century. Although it is

⁸⁰ *Archæological Survey of Western India*, Vol. IV., p. 92-103 (Nos. 5-11).

⁸¹ See especially Inscription No. 20, in which a village given as a present by Usabhadāta is again given away by an Andhraking. *Arch. Sur. W. India*, Vol. IV., p. 106 (No. 6) and p. 112-113 (No. 20).

⁸² *Arch. Sur. W. India*, Vol. IV., p. 106 (No. 14, last line.)

⁸³ *Ibid.* p. 105, where 14 is to be corrected to 18.

⁸⁴ Compare also Dr. Bhāṭṭārkar's remarks in his *Early History of the Deccan*, p. 20 ff. where the date of the inscription is placed somewhat earlier. In several particulars, I can not agree with Dr. Bhāṭṭārkar.

composed in on old Prakrit very much nearer to Pāli, still the results that may follow from its examination would of course be equally applicable to Sanskrit Poetry; as there exists no separating barrier between Prakrit and Sanskrit *kāvya*. As far as the information provided by the *Alaṅkāra-śāstra* goes, both Sanskrit and Prakrit compositions are regarded as branches of a common stem and are both bound by the same laws. Accordingly we find that all the known Prakrit *kāvya*s are composed in obedience to the same canons as are written in Sanskrit. They present the same varieties of style and the same *alaṅkāras*, and it happens not seldom that one and the same author uses both Prakrit and Sanskrit. Even the author of our inscription must have known Sanskrit and been expert in Sanskrit *kāvya* also, because he appears to be guilty of some Sanskritisms. The compound *Vijhachhavaṇṭa*⁶ (l. 2) appears to be but a transliteration of the Sanskrit *Vindhyarṇhavaṇṭa*, since the Greek form *oδḡryas* shews that the Prakrit name of the Rikshavat began with *v*. Another apparently Sanskrit *śukdhī* is found in *°Kesarājuna*⁶ (l. 8), where the rule of the Prakrit demands *°Kesarajuna*, i. e., *°Kesarajjuna*⁶. So also the form *pitapatiyo* (l. 11) occurring in a writing of such a late date, must be looked upon as only an archaic imitation of *pitripatpyoh*. As far as I know this is the only instance of a genitive in the dual number, which has been entirely lost even in older Prakrit literature. It is even possible that the inscription might have been at first composed in Sanskrit and then translated or transliterated, as the Prakrit, which resembled Pāli, was then, as even in much later times, the official language in southern India.⁶⁶ Whatever may be the case, so much is certain that the author was acquainted with the Sanskrit language as well as the Sanskrit literature.

His work is a *gadyaṁ kāvyaṁ* like the Girnār inscription discussed above and belongs to the class of *praiśasti*. After the date given in quite an official manner, there follows the description of the king of kings Gotamiputa Sātakaṇi written in a high poetic style, which together with the shorter praise of his mother Gotamī Balasiri and of the cave prepared by her, in all, covers eight lines and a half, and altogether makes a gigantic sentence. Then there come at the end two short sentences which say that the Queen gave away the cave to the Bhadrājanīya monks and that her grandson Puṣyamī assigned the village Piśāchīpadraka for the preservation of the sculpture and pictures. In these concluding sentences, the language is quite business-like; but even there we find some figures on a small scale made use of. In the first of these, the mother is described by means of three epithets giving rise to alliteration, *mahādevī mahāḥjamāḥ mahārājapatāmāhī*, in the second the king is spoken of not by name but as *mahādevīya ajjakāya sevīkāmo piyakāmo ṇa-[id Sakaladakkhīṇ]paṭhesaro*, 'the grandson ever willing to serve and please the Queen the grandmother, the lord of the whole of the Deccan.' Thus even here the author does not forget his profession altogether.

As for the first and the main part of the *praiśasti*, its style entirely resembles that of the Girnār *praiśasti* in that long compounds are used to bring out *ojas* or the force of language. These run on almost exclusively from l. 2 to l. 6; then in l. 7, the almost breathless reader is favored with a resting pause, in as much as only short words are used. In the last line and a half of the description of the king, the poet again takes a new leaf and uses towards the end the longest compound which contains sixteen words with forty-three letters (*paramagaruḷa ityādi*). The *Anuprās* is more liberally made use of, as is the case with the Girnār *praiśasti*. Thus we have in l. 2 *°asika-asaka*,⁶⁷ in l. 3 *°paratapatissa*, *divasakara hara*⁶⁸ *°kamalavimāla*,⁶⁹ in the last parts of the compounds in l. 3 *°dhanasa*, *°padanasa vāhanasa*, *°dahanasa*, and many more similar expressions. In one point, however, the Nāsik inscription differs from the Girnār *praiśasti*. While the latter disdains the use of the conventional similes of court poets, these are found in our *praiśasti* in a very large number and sometimes very striking too. Just the very first epithet of the king *Himavata-Meru-Mandara-pavata-sama-sārata* 'whose essence resembles that of the mountains Himavat, Meru, and Mandara, is conceived quite in the *kāvya* style. Thus the author shows that the comparisons of the king with these mountains so favourite in later times were in vogue even in his day. What he, in reality, means by the phrase in question is that Sātakaṇi was possessed of

⁶⁶ See on this my remarks on the Prakrit Pallava Land-Grant in the *Epigraphia Indica*, p. 41.

great treasures, like the Himālaya, that he was the central point of the world, and overshadowed the same with his might, like the Meru, and that like the Mandara which was used as a churning rod by gods at the time of churning out nectar, he knew how to bring to light and to acquire for himself Lakshmi, the *Fortuna regum*.

The correctness of this explanation can be easily demonstrated. For, the idea that the Himālaya hides within himself immeasurable treasures has been prevalent amongst the Indian people since a very old time, and it finds its expression in mythology, in that the abode of Kubera is located in the Himālaya. To the court poets, the idea that riches are the *sāra* of the Himālaya is so obvious that at times they do not express it at all, but only hint at the same. Thus Kālidāsa says in *Raghuramāya* IV, 79 :—

परस्परेण विज्ञानस्तेषुपावनपात्रिषु ।

सता दिनवतः सारो राज्ञः सारो हिमाद्रिणा ॥

‘As the (Gaṇas) (came) with presents in their hands, they understood each other's essence; the king, that of the Himālaya (i. e., his riches, and the Himālaya that of the king (i. e., his might.)’

Equally old and generally prevalent is the conception that the mountain Meru is the centre of the world; and kings are very frequently compared with the same, in *kāryas*, in order to illustrate their great might. Thus, in the beginning of the *Kādambarī*, Bāṇa says (p. 5. l. 11, Peterson's edition) of the king Śūdraka :—

मेरुवि सकलभुवनेष्वजीवमानपावच्छायः

‘He resembles Meru in that all the worlds live in the shadow of his feet,’ i. e., are preserved through his protection, just as they live in the shadow of the spur of the mountain. The comparison is also found in the inscriptions, e.g., in the *prāśasti* which forms a prelude to the grant of land made by the Chaulukya king Mūlarāja I. It is said there⁶⁶ (l. 3):—मेरुवि सर्वज्ञ मध्यस्थः ‘He resembles Meru, in that he is always *madhyastha*, i. e., the centre of the world, and impartial.’

As for the mountain Mandara, it is one of the most well-known myths, according to which it served gods as a churning-rod, at the churning of the milk-ocean. As on that occasion, Lakshmi, the goddess of wealth, came out, and she is often described as the representative of the royal power and splendour and even as the consort of kings, the kings themselves are often compared with the Mandara mountain in order to hint at the idea that they churn out Fortune from the ocean of the enemies. Thus in *Śrī-Harshacharita*, p. 227, l. 7 (Kāśmīr edition) Bāṇa says, while describing the king Pushyabūti, that he was मन्दरमय इव लक्ष्मीसमाकर्षणे ‘Mandara-like in drawing out Lakshmi.’ This same thought is further elaborated in verse 7 of the Aphaṇḍ *prāśasti*,⁶⁷ a composition of the seventh century, written in a high Gauda style, where it is said of the king Kumāragupta :—

भीम श्रीशानवर्मसितिपतिशशिनः सैन्धुधोपसिन्धुर्लक्ष्मीसंप्राप्तिहेतुः सपत्नि विनयितो मन्त्रीभूय येन ॥

‘Who became Mandara and immediately churned out the terrible army of the illustrious Śānavaṛman, a moon amongst princes, the army, which was the means of the acquisition of Fortune, and thus resembled the milk-ocean.’ A still more artificial representation of the simile is found in the *prāśasti*⁶⁸ of the Rāṭhor king Govinda II, verse 3, belonging to the beginning of the ninth century. I have explained it fully in the translation of the passage.

In the face of these facts, it can not be doubted, that the author of the Nāsik inscription intended to say or to hint all that is contained in the explanation given above,⁶⁹ and when we see that he dares to express himself in such an extraordinarily concise manner and is content with only

⁶⁶ See *Ants*, Vol. VI. p. 191. My translation as given there mentions only the second meaning of *madhyastha*. It is, however, not improbable that the writer also means to say that Mūlarāja was the centre of the world, although the expression cannot apply to a petty ruler who possessed only a few miles of land. Such considerations, however, have no weight with a court-poet.

⁶⁷ *Corpus Inscr. Ind.*, Vol. III., p. 203, l. 7.

⁶⁸ *Ants*, Vol. VI, p. 65.

⁶⁹ It is just possible that he had in view even other less important qualities of the mountains named here. Thus, as the Meru is the abode of the *vīrudha* or the gods, and as *vīrudha* also means ‘a wise man’, the comparison of the king with the Meru may imply a compliment to the effect that the king was surrounded by wise counsellors and learned men. Compare, for instance, *Vāśavadattā*, p. 14, l. 1 मेरुवि विबुधान्वितः.

alluding to the *sāra* of the three mountains, we cannot but suppose that in the first place he knew all the myths in question and in the second place that the comparisons of kings with these mountains were in vogue then; for otherwise the expression in question would have been quite unintelligible to the hearer. The comparisons involved in the epithets in the next lines 3-4 are some of them so familiar that it is unnecessary to demonstrate their occurrence in the *kāvya*s. This is the case, for instance, with the phrase *disasakara-kara-vibodhita-kamala-vimala-sadisa-radanasa*, 'whose face resembles a spotless lotus which the sun's rays have awakened (from the nocturnal sleep)', of which we should only remark that the use of the word *kara*, which also means 'hand,' is not unintentional. Equally commonplace is the comparison in *paṭipūṣa-chada-madala-sasirika-piṇḍa-dasanasa* 'whose appearance is lovely and lustrous like the disc of the full moon.' What is, of course, meant is that the face of the king shines like the full moon. But as the face has been spoken of before, the author uses *dasana* for *rudana* and thus varies somewhat the usual idea. Lastly, no examples are necessary for *śaravaraṅgarikamaśādrurikamasa*, 'whose gait is beautiful like that of a lordly elephant,' and *bhūjagapatibhogapīṇavaripuladighasudarabhujasa*, 'whose arms strong, round, massive, long and beautiful like the coils of the prince of serpents.' With regard to the last epithet it must be observed, in the meanwhile, that the author has taken great troubles to give a new unusual form to the old comparison of the arm of a warrior with a serpent, already very usual in the epics. For this purpose, he mentions the serpent-prince Sesha instead of some other favourite serpent, and piles together a number of adjectives. The first of these things is often done by court poets; e. g., in *Raghuvamśa* XIV. 31, Kālidāsa describes Rāma as *Sarpādhirājorabhujā*. Somewhat more rare is the absurd notion in *ti-samuda-toya-pīṇa-rāhanasa* 'whose armies drink the water of the three oceans,' though sanctioned by the usage of Indian poets. Similar expressions are now and then met with in panegyrics and *prabandh*s, with a view to suggest that the victorious armies have pressed forward to the shores of the ocean. A rhetorician remarks that the water of the ocean would never be drunk. But nevertheless the poets very frequently use expressions like the one above, which, therefore, cannot be looked upon as involving a breach of *auchaiya*.⁷⁰

The following lines contain nothing useful for our purpose. Their object is to represent Śātakaṇi as a ruler who lived up to the rules of *Nṛsīṅgīya*. On the other hand, the short epithets in l. 7 remind us of several passages in the descriptions of heroes and heroines by Bāṇa who also frequently interrupts the long-winded compounds and the tiring rows of comparisons, in quite a similar manner, and now and then makes use of similar expressions in such cases. The rightness of what we say will be best shown by placing this part of the inscription side by side with a passage, in Bāṇa's *Kādambarī*, from the description of the king Śūdraka⁷¹ :—

आगमानं विलसत् सगुरितान् भसत्सि सिरीषं भवि-
मानसं वपुष्पापानं भवत्स एककुसुमस्य एकधनुषस्य एकह-
स्तस्य एकवल्गुस्य ।

कर्ता महाधर्मानामाहर्षां कनूनामाहर्षाः सर्वसाक्षात्प्राप्त-
स्त्वितिः कुलानां कुलभवनं गुणानामागमः काव्यामृतसा-
नामुदयस्योत्थो विषमण्डलस्थोत्थात्केतुपहितजनस्य प्रवर्त-
यिता गोटीबन्धानामाश्रयो रसिकानां प्रत्यादिशो धनुष्मतां
धौरवः साहसिकानामप्रणीविबन्धानाम् ।

Of course Bāṇa's expressions are much more choice, and they show a considerable advance in the development of the style. Nevertheless, a certain similarity is unmistakable and the reason why simpler epithets are inserted in the midst of more complicate ones is no doubt the same in both the cases. In l. 8, we meet with two long compounds which compare Śātakaṇi with the heroes of *Mahābhārata* as well as with the kings of yore described in that work:—'Whose bravery was similar to that of Rāma (Halabhrīṭ), Keśava, Arjuna and Bhīmasena,' and 'whose lustre resembled that of Nābhāga, Nahusha, Janamejaya, Saṁkara, Yayāti, Rāma (of the Raghu race) and Ambarisha.' Further these two compounds are separated, certainly not without intention, by another epithet inserted between them. Comparisons with the kings of epic tales are as a rule used by Subandhu and Bāṇa, in the descriptions of their heroes, who, however, work them out in a far finer way. They bring out the similarity in particular points by means of a *śleṣa* on every

⁷⁰ See, for instance, the Udepur *prabandh*, verse 10; *Er. Ind.*, p. 234. The name of the rhetorician I have unfortunately not noted. ⁷¹ *Kādambarī* p. 5, l. 12-16; compare also *Kādambarī* p. 56, l. 7-8.

name or they show that their heroes surpass by far the old heroes, in that they go more deeply into the original.⁷² Here, in our inscriptions, we have to do with the beginnings of a development which reached its high point certainly in the seventh century, or perhaps even much earlier.

To the great significance of the immediately following passage, I have already alluded (the *Sahasākacharita*, of Padmagupta p. 48 ff.):—'Who, standing in the forefront defeated the hosts of his enemies, in a battle in which, in a manner immeasurable, eternal, incomprehensible and marvellous, the wind, Garuḍa, the Siddhas, Yakshas, Rākshasas, Vidyādharas, Bhūtas, Gandharvas, Chāraṇas, the sun, the moon, stars and planets took part.'⁷³ It is just the oldest instance of a mixture of history and mythology, so usual in the later court poets. As Bilhana repeatedly makes Śiva to interfere in the fortunes of his patron Vikramāditya, or as Hemachandra surrounds his master Jayasimha-Siddharāja with supernatural beings, or as Padmagupta-Parimala reduces the history of the life of Siddharāja to a pure myth, so has here our author given heavenly powers as confederates to the father of his master. This passage thus provides us with an interesting point of connection between our inscription and the style of narration of the court poets. About the meaning of the next phrase, unfortunately we are not sure, as the first letter can be read as *na* or *pa*. If we read *gaganarakhadhā gaganatalam abhivigādhasa*, as is most probably the case, then it would be rendered thus:—'Who towered up higher in heaven than the shoulder of a great mountain, or the trunk of a grand tree.'⁷⁴ With this we may compare *Raghurākṣa* XVIII, 15, where it is said of king Pāriyātra:—

उच्चैःशिरस्त्वाजितवारिवाचं लक्ष्मीः सिधेने किल वारिवाचम् ।

'Fortune resorted, indeed, to (the king) Pāriyātra, the height of whose head surpassed (the mountain) Pāriyātra.'

If, on the other hand, we read *nāgararakhadhā*, then we must translate:—'Who went up into the heaven from the shoulder of his lordly elephant.' The meaning then would correspond to that of verse 20 in the Lakkā Maṇḍal *prajasti*,⁷⁵ where it is said of Chandragupta, the consort of the princess Śvartā of Śiṅghapura:—

भर्तारि गतवदि नाकं करिणः स्वम्भात् ।

'As her husband ascended to heaven, from the shoulder of his elephant'

These words describe Chandragupta's death, and would mean that he fell from an elephant, and had his neck broken, or that he, while fighting on elephant-back in the battle, met with a hero's death, or perhaps that he exchanged the splendour of the earthly life of a prince for heaven. The second alternative seems to be the most probable. At any rate the passage referring to Śātakaṇi will have to be understood thus, in case the reading *nāga*^o is the correct one.

In the remaining lines, we have first, the praise of the queen Gotamī Balasiri, 'who, in every way, acted worthy of her title "the wife of a royal sage"'; secondly, the very bold, though improper, comparison of the mountain Triraṣmi with a peak of the Kailāsa mountain, and lastly the assurance that the cave possessed a magnificence which equalled that of a lordly palace of gods. All these three notions are most usual in *kāvyas*. Instances of the third have been already mentioned by us above on p. 142.

What we have said so far should quite suffice to prove that the Nāsik-inscription No. 18, also, bears a close relationship with the *gadya kāvyas* preserved for us, and that it especially contains many comparisons current in the latter. It must, however, be repeated that this *prajasti* occupies a considerably lower rank than the prose parts in Haribhoga's *kāvyas*, and is still less artificial than the works of Subandhu, Bāṇa, and Daṇḍin.

(To be continued.)

⁷² Compare, for instance, *Vācasatī* p. 15; p. 22, l. 1; p. 27, l. 3; p. 122, l. 4—5 and especially the passage from the *Haribhoga* referred to by Dr. Cartellieri, *Wiener Zeitschrift f. d. Kunde des Morgenlandes*, Vol. I, p. 123.

⁷³ Dr. Bhāṇḍārkar and Dr. Bhagvānī translate *vichitra*—which I have freely rendered as 'in which—took part'—by 'witnessed'. The reason why I do not follow this meaning is that no examples of this meaning accepted by the two gentlemen are known to me; on the contrary, *Yuddham vichar* 'to fight a battle' is given in the Petersburg Lexicon.

⁷⁴ The ablative implies here, as is often the case in Sanskrit, that the Positive form has the sense of the Comparative.

⁷⁵ *Ep. Ind.*, p. 13.

MISCELLANEA.

MATACHI: A DRAVIDIAN WORD IN VEDIC LITERATURE.

COL. JACOB, in a paper contributed to the *Journal of the Royal Asiatic Society* for April 1911, p. 510, makes two interesting suggestions regarding the word *matachi* occurring in the *Chhândogya-Upanishad* I, 10, 1, मटचीहतेषु कुरुषु &c., which is explained by some commentators as रक्तवर्णः शुद्धवर्णविशिष्टः. Col. Jacob says, that "these red-coloured winged creatures are no other than locusts" and that the word *matachi* "looks like an importation from outside *Āryāvarta*."

It is interesting to note that both of these suggestions are confirmed by the fact that *matachi* is a Sanskritised form of the well-known Dravidian word *mičchi* or *mičche*, meaning locusts, which is used at the present day in the Dharwar District. Mr. Kittel, in his *Kannada-English Dictionary*, explains the word *mičche* thus: "that which hops, a grass hopper; a locust." According to the same authority the word appears as *mičutha* in Telugu, as *sičfal* or *večfal* in Malayalam, and as *veččakkī* in Tamil. The word is obviously derived from the root *mič*, to hop.

Mr. Kittel in the introduction to his *Dictionary* gives a very long list of so-called Sanskrit words, which are really Dravidian. But in compiling this list he seems to have drawn exclusively upon classical Sanskrit, *Matachi* is thus the only Dravidian word as yet discovered in Vedic literature.

K. B. PATHAK.

SANKARACHARYA'S REFERENCE TO JAYADITYA.

In his commentary on the *Chhândogya-Upanishad* I, 1, 4, when elucidating the expression कतना कक Sankarāchārya quotes the well-known *sūtra* वा वहुनां जातिपरिग्रहे उत्तमम् [Pāṇini V, 3, 93] and says that the compound जातिपरिग्रह in this *sūtra* should be treated as a locative and not a genitive compound, and continues:—

It may be contended that the illustration given in the commentary on this *sūtra*, namely, कतनः

कठ इत्याद्युदाहरणम् does not favour our view. But we reply that even this illustration is in perfect harmony with our view, if the question relates to the individuals composing the *Kaṭha śākhā*. Sankarāchārya's words are:—

ननु जातेः परिग्रह इत्यस्मिन्निघोः कतनः कठ इत्याद्युदाहरणं नुपपन्नं जातौ परिग्रह इत्यत्र तु न नुपपत्तेः । तत्रापि कठविजातादेव व्यक्तिवद्व्यभिप्रायेण परिग्रह इत्यस्योपः ।

Ānandajñāna explains this thus:

अस्मादिदं विमहापरिग्रहे वृत्तिकारीयमुदाहरणं विदुर्भवेत् । कठसमस्तस्य व्यक्तिविशेषस्थानावावृत्तिं सूचयते नन्विति । उदाहरणेपि सत्त्वां कठजातौ तद्व्यक्तिवद्व्यभिप्रायेण तदन्वयतन्निर्धारणानिप्रायेण परिग्रहे उत्तमं चित्त्वङ्गीकारात् परीक्षोदाहरणविषयोऽस्मत्पक्षेऽस्तीति परिहरति तत्रापीति ।

Chhândogya-Up. Ānandāsrama Ed., p. 10 Here वृत्तिकारीयमुदाहरणं means the illustration given by the *Kāśikā-vṛttikāra* Jayāditya, who died in A. D. 661, and whose words referred to above are:—

कतनी भवतां कठः

Kāśikā-vṛtti, Benares Ed., Part II, p. 94. Sankarāchārya omits the word भवतां and indicates this by using the expression इत्यादि thus: कतनः कठ इत्याद्युदाहरणम्. It may be stated here that Kātyāyana and Patañjali, as interpreted by Kaiyata, hold that the words जातिपरिग्रह should be left out of the *sūtra* as unnecessary, and therefore an illustration of this *sūtra* is given in the *Mahābhāṣya*. The fact that Sankarāchārya quotes the celebrated Buddhist grammarian Jayāditya, who died in the second-half of the seventh century A.D., is so interesting from a literary and historical point of view that it deserves to be brought to the notice of Sanskrit scholars.

K. B. PATHAK.

Poona.

BOOK NOTICE.

INDIAN CHRONOLOGY:—A practical guide to the interpretation and verification of Tithis, Nakshatras, Horoscopes, and other Indian Time-records, from B. C. 1 to A. D. 2000.—By DEWAN BAHADUR S. PILLAI, M.A., B.L., LL.B.; published by Grant Co., Madras (1911). Price Rs. 5.

THE present book by Dewan Bahadur S. Pillai dealing with the citation of dates according to the various systems in vogue in India ranging between 1 B. C. and 2000 A. D. fills a longfelt want. Roughly speaking the book may be said to consist of two main divisions—the letter press and the tables. The former gives the preliminary information necessary for an intelligent use of the tables. It explains the relations between Indian Astronomy and Indian Chronology. Chapter XV gives a list of the principal systems of chronology in use in India, along with the mode of calculating the equivalent Christian date therefrom. The catalogue of Hindu festivals in relation to tithis given in Chapter XVI is likely to prove of much interest even to the ordinary layman. The three parts, into which the letter-press of the book is actually divided, are so arranged and treated that they gradually develop one into the other, without in the least slackening the interest of the general reader in the study of even such a dry abstruse subject as chronological research.

By far the most important portion of the book—and also the practical one—is the tables given therein. They occupy nearly 250 pages closely bristling with figures. They are twenty-two in all, embodying the various items of value and interest to the historian, the archaeologist and chronologist. In these tables the most important one, and of greater practical interest to the ordinary man of the world, is Table X, which enables him to know the exact English equivalent of any date from 1 B. C. to A. D. 2000. In this table also are given the solar years, new moons, and eclipses that occur during this long period of time. The calculations for this period of two thousand years is made according to the mode followed in the *Sūrya-siddhānta* as it is found at present. For the period from A. D. 500 to A. D. 999 the calculation according to the *Arya-siddhānta* also is given, and this special calculation is valuable owing to the immense influence which the *Arya-siddhānta* enjoyed during this period. Dewan Bahadur S. Pillai's calculation for the period from 1 B. C. to

500 A. D. is made only according to the *Sūrya-siddhānta*. It is accurate and clear, but it is likely to lead the reader to form the wrong impression that *Sūrya-siddhānta* was followed in those days also. Varāhamihira's *Pañcha-siddhāntikā* no doubt refers to a *Sūrya-siddhānta*, but it was not the *Sūrya-siddhānta* of the present day, from which the author has adopted the mode of calculation in the book. The calculation of the dates prior to 500 A. D. according to the latter-day *Sūrya-siddhānta* is, therefore, not quite in harmony with facts, and is merely a carrying backwards of the process used authentically only for the period from 500 A. D. onwards.

The eye-table appended at the end of the book sums up the results of the preceding tables, and is of great value for obtaining general results. It gives in a remarkably well condensed form almost all the items necessary to determine a date with fair accuracy. But for obtaining a detailed result, the reader must resort to the preceding tables.

Messrs. Dikshit and Sewell's book on Indian Chronology has acquired prominence because it was the first one in the field, but in point of cheapness and utility Dewan Bahadur S. Pillai's present publication in our opinion is much better. To an ordinary man Dikshit and Sewell's book is prohibitive owing to its high price; and consequently there was a longfelt want of a cheap ready-reckoner of dates. Mr. S. Pillai's book, however, meets this want to a remarkable degree. His methods are on the whole generally correct and sound. To workers in the various fields of antiquities and archaeology, the present book must prove to be of incalculable value. To the layman also it will be of no small interest, inasmuch as hardly anyone will be found who has not at any time to look up some old date or another. Mr. S. Pillai's book is being constantly used by the *Bhārat-Itihāsa-samśodhak-maṇḍal* of Poona for verifying dates from Marāṭhā history. In the course of calculations made for several dates of the Marāṭhā period, only one inaccuracy was detected. On page 116, the week day of 1st January 1704 ought to be 7 (Saturday) and not 1 (Sunday) as printed in Table X. This is the only misprint so far discovered. But speaking generally, the work is remarkably free from misprints or inaccuracies of any kind, which are too often the besetting sin of books teeming with figures.

Poona.

G. S. KHARE.

THE OBSOLETE TIN CURRENCY AND MONEY OF THE
FEDERATED MALAY STATES.

BY SIR E. C. TEMPLE, BART.

(Continued from p. 216.)

APPENDIX V.

Subsidiary Tables and Scales made during Investigations into the
Malay Tin Currency.

I.

*Professor Ridgeway's and Mr. Skeat's Table of Tin Money (Pahang)
from the Cambridge Museum (and other) specimens.*

No.	Museum number.	Approx. fraction of "dollar."	Actual weight in grs. Troy.	Measurement in inches at base.		
				length.	width.	height.
1.	24 I		160	1	1	$\frac{1}{4}$
2.		$\frac{1}{12}$	260			
3.			712 $\frac{1}{2}$			
4.	24 H	$\frac{1}{4}$	777	$2\frac{1}{8}$	$2\frac{1}{8}$	$1\frac{1}{8}$
5.	24 G	$\frac{1}{4}$	1036	$2\frac{1}{8}$	$2\frac{1}{8}$	$1\frac{1}{8}$
6.			1036			
[7.		1	? 3200] ⁸³			


II.

*Professors Ridgeway's and Mr. Skeat's Table of Tin Currency (Selangor)
from Cambridge Museum Specimens.*




No.	Museum Number.	Approx. fraction of "dollar."	Actual weight in oz. av.	Measurement in inches at base.		
				length.	width.	height.
1	885	$\frac{1}{16}$	12 $\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{1}{2}$	1
2.	884	$\frac{1}{16}$	22 $\frac{1}{2}$	$3\frac{1}{2}$	$3\frac{1}{2}$	$1\frac{1}{2}$
3.	883 ⁸⁷	$\frac{1}{8}$	30	$3\frac{1}{2}$	$3\frac{1}{2}$	$1\frac{1}{2}$
[4.			56] ⁸⁴			
5.	881	$\frac{1}{4}$	98	$4\frac{1}{2}$	$4\frac{1}{2}$	$2\frac{1}{2}$
6.	880	$\frac{1}{4}$	112	$4\frac{1}{2}$	$4\frac{1}{2}$	$2\frac{1}{2}$
[7. ⁸⁵		1	224] ⁸⁶			
8.	879		19	$2\frac{1}{2}$	$2\frac{1}{2}$	$1\frac{1}{2}$
9. ⁸⁹		$\frac{1}{8}$	72	4	$3\frac{1}{2}$	$2\frac{1}{2}$

⁸³ This is the "dollar" unit.

⁸⁴ These represent the *bidar* or quarter "dollar" unit and the "dollar" unit respectively.

⁸⁵ The first three specimens bear the *tampo' manggis* (mangosteen calyx)  mint mark; the last two have no mint mark.

⁸⁶ The first seven numbers refer to the "Pagoda" Scale. See ante, p. 92.

⁸⁷ The last two numbers refer to the "Sugarloaf" Scale. See ante, p. 92. The last bears the mangosteen calyx.  mint mark on the top, and the *walumbis*, tin mine recessed *sh* f, marks  and  on the sides. No. 879 is unsymmetrical and very roughly cast.

III.

Mr. Skeat's Money Tables.

A.

cents to dollar.	Singapore and Malacca.		Penang and Province Wellesley.	
	2 quarter cents make	1 half cent	2 quarterduit ⁹⁰ make	1 half cent
	(duit, pese) ⁹¹			
1	2 half cents	1 cent (sen)	2 half cents	1 duit (cent)
2½	2½ cents	1 wang ⁹²	5 duita	1 buaya
5	2 wang ⁹³	1 boya (buaya)	2 buaya	1 kupang
10	2 buaya	1 kupang	1½ kupang	1 tali
20	2 kupang	1 20-cent piece	1½ tali	1 20-cent piece
25	1½ 20 cent piece	1 quarter (suku)	1½ 20-cent piece	1 suku
50	2 suku ⁹⁴	1 jampal ⁹⁵	2 suku	1 jampal
100	2 jampal ⁹⁶	1 dollar	2 jampal	1 dollar

B.

Modern British in Federated Malay States.

cents to dollar.	2 quarter cents	make	1 half cent
1	2 half cents	"	1 cent
5	5 cents	"	1 buaya
10	2 buaya	"	1 kupang
20	2 kupang	"	1 20-cent piece
25	1½ 20-cent piece	"	1 suku ⁹²
50	2 suku	"	1 jampal
100	2 jampal	"	1 dollar

IV.

Federated Malay States.

Mr. Skeat's table of old Dutch money.			Mr. Skeat's table of Tin Ingot Currency.		
cents to the dollar.	in Federated Malay States.		cents to the dollar.	in Perak, Selangor, Sungai Ujong, Negri Sembilan.	
	4 pese	make 1 duit (cent)	5	2 buaya (cro-	
2½	2½ duit	" 1 wang baharu (dubbeltje)		codile) make	1 tampang (cake)
6½	2½ wang-ba- haru ⁹⁴	" 1 kändəri-perak ⁹⁵	6½	1½ tampang	" 1 tali (string)
12½	2 kändəri-pe- rak	" 1 tali	12½	2 tali	" 1 bidor (viss)
25	2 tali	" 1 suku	25	4 bidor	" 1 "dollar"
50	2 suku	" 1 jampal (guilder)			
100	2 jampal	" 1 dollar ⁹⁶	100	6½ "dollar "	" 1 kəping (slab)
				2½ kəping	" 1 pikul (load)
				3 pikul	" 1 bahara

⁹⁰ In Penang the duit - a cent, following the old Dutch system.⁹¹ These names were also formerly current in Selangor.⁹² Wang and suku are moneys of account, not coins.⁹³ Jampal are obsolete and scarce.⁹⁴ i. e., the new wang, which, when first introduced, was copper.⁹⁵ i. e., silver candareen. For candareen, see ante, Vol. XXVI, pp. 314 ff. This represents the half-tali, which, as money of account, was reckoned at 6 cents not 6½ cents. As money, it was called so-perak, one silver piece.⁹⁶ The Spanish dollar of 416 gra.

V.

Federated Malay States.

Tables from the information⁸⁷ given to Mr. Laidlaw:

see his letter dated 14 June 1904.

(1). Ingot Currency.

10 tahlil	make	1 pēnjuru
2 pēnjuru	"	1 piak
2 piak	"	1 suku
2 suku	"	1 jampal (guilder)
2 jampal	"	1 ringgit (dollar)

160 tahlil to the dollar of 10 kati (of tin).

Therefore

NAME	value in cents of dollar.	value by av. weight.	value in kati of 14 lb.
tahlil	$\frac{1}{16}$	1½ oz.	$\frac{1}{16}$
pēnjuru	$6\frac{1}{4}$	13½ oz.	$\frac{1}{8}$
piak	12½	1 lb.	$\frac{1}{4}$
suku	25	3½ lb.	$\frac{1}{2}$
jampal	50	6½ lb.	5
ringgit	100	13½ lb.	10

2½ kēping (slab) = 1 pikul: 3 pikul = 1 bahara of 300 kati = 400 lbs. Therefore
kēping = $37\frac{1}{2}$ kati = 50 lbs: 1 pikul = 100 kati = 133½ lbs. This gives a scale—

3½ dollars	make	1 kēping (slab)
2½ kēping	"	1 pikul
3 pikul	"	1 bahara (of tin) of 400 lbs.

which is the standard scale of 420 lbs. to the bahara reduced to suit the existing British current money.

(2). *Gambar timah* (tin models of animals).

Selangor.

tampang = kupang = 10 sen = 10 cents
bidor = suku = 25 cents

Scale.

50 dait ayam	make	1 buaya (1/20 dollar)
2 buaya	"	1 tampang (1/10 dollar)
2½ tampang	"	1 bidor
4 bidor	"	1 dollar (ringgit)

(3). Perak.

Scale.

kati to the bahara.			
	10 tahlil	make	1 Pēnjuru
1	1½ pēnjuru	"	1 kati (tampang)
1½	1½ kati	"	1 piak (tali)
2½	2 piak	"	1 suku (bidor)
5	2 suku	"	1 jampal
10	2 jampal	"	1 ringgit
37½	3½ ringgit	"	1 kēping
100	2½ kēping (slab)	"	1 pikul
300	3 pikul ⁸⁸	"	1 bahara

(To be continued.)

⁸⁷ Very confused as given to Mr. Laidlaw.

⁸⁸ Varying to 320 kati.

ONE MORE BUDDHIST HYMN.

BY G. K. NARIMAN, BOMBAY.

THE spread of the Mahāyāna religion is due to the appeal it makes to the heart, laid on the principle of devotion (*bhakti*), as opposed to the cold intellectuality of the Hinayāna. We do not find in Pāli any fervid hymns or prayers ever addressed to the Buddha, but we have a large number of them in the later Mahāyāna Buddhism, as witness the *stotra-saṅgraha* published by the *Bibliotheca Indica*.

Some time ago Professor Sylvain Levi reconstructed two hymns, translated in Chinese character from Sanskrit by an Indian monk from the college of Nālanda about the year 1000. They are called *Aṣṭama-chaitya-vandana* and the *Triśadyastava*. The latter is a hymn on the three "bodies" of the Buddha, and consists of sixteen stanzas, of which we find a Tibetan translation under the name of *Shu-gsum-la-ded-po*. The Chinese transcription was made by the celebrated traveller Fa-hien. The Sanskrit text of the first twelve stanzas of this ode is also preserved in the beginning of the Tibetan block-print (*Deb-ther-snon-po*) communicated by M. Baradjian to Baron Von Stael-halstein, who expressed his opinion (*Bulletin of Imperial Academy of Sciences* No. 11, 1911), that the Sanskrit text preserved in the block-print is independent of Chinese tradition, and deserves to be published especially, as it sometime deviates from the reconstruction of Professor Levi, and in some cases diverges from the original used by the monk of Nālanda, who attempted about 900 years ago to reproduce the Indian sounds by means of Chinese symbols. The Baron proceeds to give the Sanskrit text and the Tibetan version according to the *Deb-ther-snon-po*, as well as the Tibetan text cited from the Tanjur.

All the texts are in the *śrāgdhara* metre, but while the Tanjur text represents nineteen syllables, the others have twenty-one.

यो नैको नापि अनेकः स्वपरहितमहासंपदाधारभूतो ।
यो नैको नापि अनेकः स्वपरहितमहासंपदाधारभूतो ॥
नैवानासो न नावः स्वनिवसमर ॥ विभावः स्वभावः ।
नैवानासो न नावः स्वनिवसमरसो दुर्विभावः स्वभावः ।

Note : It seems that even पाद्मान read

निलैषं निर्विकारं शिवमसमसमं व्यापिनं प्रपञ्चम् ।
निलैषं निर्विकारं शिवमसमसमं व्यापिनं निष्प्रपञ्चम् ।
वहे प्रस्ताम्भवेद्यं समहमनुपमं धर्मकायं जिनानां ।
वहे प्रस्ताम्भवेद्यं समहमनुपमं धर्मकायं जिनानां ॥
लोकापितानि चित्वां सुकृतसमफलानात्मनो यो विभूतिम् ।
लोकापितानि चित्वां सुकृतसमफलानात्मनो यो विभूतिम् ।

Note : पाद्मान must have read also सुकृतसम see the French translation of the Chinese phrase of *चिकावस्तर*. by Sphavannes, R. H. R., 34, 16.

परचम्यते ? विचिचान् मयवति महतीं यतां प्रतिहेतुं ।
परचम्यते ? विचिचान् मयवति महतीं धीमतां प्रतिहेतोः ।

For परचम्यगता see महाप्रज्ञापति 245, 34.

It may be noted that पाद्मान is not particular about representing the *विसर्ग*.

ब्रह्मानां सर्वलोकप्रसूतमविरतो शारसज्जर्मकोद्यं ।
ब्रह्मानां सर्वलोकप्रसूतमविरतो शारसज्जर्मकोद्यं ।
वहे संयोगकायं समचनिष महाधर्मराजां प्रतिष्ठां ।
वहे संयोगकायं समहमिह महाधर्म राज्य प्रतिष्ठं ।
सत्त्वानां भागहेतुः कचिदनम्र इवाभाति यो दीप्यमानः ।
सत्त्वानां प्राकहेतुः कचिदनल इवाभाति यो दीप्यमानः ।

संबोधो धर्मचक्रे कश्चिदपि च पुनर्दृश्यते यः प्रधातं ।
 संबोधो धर्मचक्रे कश्चिदपि च पुनर्दृश्यते यः प्रधातः ।
 नैकाकारप्रभृतं विभवमयहरं विश्वरूपिकपीयः ।
 नैकाकारप्रभृतं विभवमयहरं विश्वरूपिकपीयः ।
 वरे निर्वाणकायं वरादिगनुगतं तं महार्थं मुनीनां ।
 वरे निर्वाणकायं वरादिगनुगतं तं महार्थं मुनीनां ।

The rest of the text in Baradjun is altogether different from that of पाद्यान; still it may be interesting to compare the last four *śloka*s as given in the Tanjur with the reconstruction of Professor Levi.

सत्त्वार्थक कृपाणां अपरिणितमहायानपुण्ययानयानां
 कायानां सौम्यतानां प्रतिविमलमनोवाक्प्रधानां प्रधातानां ।
 कृत्वा मत्स्या प्रणामं कुशलमुपाश्रितं यन्मया बोधिबीजं
 त्रिकावस्तेन लब्ध्वा त्रिगविदमखिलं बोधिमार्गं निवृज्जे ।

REFERENCES TO BUDDHIST AUTHORS IN JAIN LITERATURE.

BY G. K. NARIMAN, BOMBAY.

Buddhist Sanskrit works of tolerable antiquity in comparison with Pāli texts are so rare that any references to them in other literatures must be welcomed. The Brahmanical Sanskrit literature hardly offers any reference to Buddhist works of antiquity, and, as Vallee Poussin has shown, the *Sarvadarśana-saṅgraha* has no reference to Buddhism that goes back to respectable antiquity. Prof. Mironov in the course of a paper on Devabhadra and his *Nyāyāvatāra-tippaṇa* in the *Bulletin of the Imperial Academy of Sciences, St. Petersburg* (April 15, 1911) points out some Buddhist authors, whose standpoint was familiar to Jaina logicians.

विभागः—

न्यायावतारनिवृत्ति

तदुक्तम् ।

अनुमेयेऽथ तच्चुल्ये सद्भावो नास्तितासति ।

निश्चितानुपलंभात्मा कार्यावस्था हेतवत्त्वः ॥

Devabhadra notes the तदुक्तम् to be विभागेनेति शेषः ॥

न्यायावतारनिवृत्ति on the आविवाक्यः तदुक्तम्

तेनान्वापोहविषयाः प्रोक्ताः सामान्यगोचराः ।

सदृशं बुद्धवैधेयं वस्तुन्येषामसंभवात् ॥

The *Tippaṇa* says प्रोक्ता आचार्यविभागेन and एतदर्थं विस्तारायिना प्रमाणवार्तिके कल्याणचंद्रकृत-टीकातोऽवसेयः ।

धर्मकीर्तिः—

The following *śloka* seems to have been borrowed by Devabhadra from *Gūṇaratna* with its polemical prefatory remark :—

यदाह रामान्धावस्यायामपि धर्मकीर्तिः ।

गच्छन्तु क्वापि ते स्वान्तकांते कावे स्वदेव च ।

यदेवार्थः प्रियाकारी तदेव परमार्थसत् ॥

धर्मोत्तरः—

The quotation is from his *Pratīkṣāśāstra* and the comment is on the terms *middha* and *dhamdha*.

ज्ञानभी [विद]

यनु चार्थक्रिया सामर्थ्येव सत्त्वम् । नान्वत् । तथा च ज्ञानभीः । यदि नान प्रतिदर्शनं सत्त्वमेव सत्त्वयापीहार्थ-क्रिया सामर्थ्येव सत्त्वमभिहितम् ॥

THE INDIAN INSCRIPTIONS AND THE ANTIQUITY OF INDIAN
ARTIFICIAL POETRY.

BY G. BÜHLER.

[Translated by Prof. V. S. Ghate, M. A.; Poona.]

(Continued from p. 234.)

VI. The conclusions and their bearing on the theory of
Renaissance of Sanskrit Literature.

Now we proceed to sum up the results following from the detailed examination carried on so far.

In the second century of our era, there existed a *Gadyaṁ kāvyam* which resembled the classical samples of the same, not only in respect of the fundamental principles, but in many details also. Like the rhetoricians and writers of the fourth and the following centuries, the poets of the second century regarded the essence of the *Gadyaṁ Kāvyaṁ* as consisting in the frequent use of *Sesquipedalia verba*. Like the later authors, they were fond of constructing very long sentences, a thing which depended, for the most part, on the length and number of compound words. However, they permitted to the reciter and the hearer, resting pauses between long compounds, by inserting shorter words or phrases made up of shorter words, some of which are not unlike those inserted for the same purpose in the classical samples of works written in high prose. Of the *Alaṅkāras* the poets make use of Alliteration, *Upamā*, *Utprekṣā*, and *Rāpaka*, and at any rate, an attempt at *Śleṣha*. As compared with what we find in the classical works, the figures of speech are, in the first place, used much more rarely, and, in the second place, are executed with much less care and skill. Sometimes these rise not at all or only very little, above the level of what is found in the epics. So also we are reminded of the language of the epics by the several grammatical forms which are used by the author of the *prajastī* of the Sudarśana lake. On the other hand, the arbitrary intermixture of history with mythology found in the Nāsik *prajastī* just corresponds to a tendency which, in much later *kāvyas*, comes to view very strongly.⁷⁶

Side by side with works written in high prose, there existed, as is to be expected, and as is distinctly shown by the Gīrnār *prajastī*, metrical works whose form essentially agreed with the rules laid down, in the oldest available manuals, for the Vaidarbha style. Further, this accordance with rules naturally points to the existence of an *Alaṅkāra-śāstra* or some theory of the poetic art. Both these kinds of composition were equally esteemed with the Brahmanic sciences, at the courts of Indian princes, and in spite of the lacunae in the Gīrnār inscriptions, it is hardly to be doubted that a personal occupation with poesy is ascribed to the king and great Satrap Rudradāman, the grandson of a non-Aryan governor of an Indo-Scythian ruler. Be this right or not, it is in any case quite evident that the poesy resembling the classical *Kāvya* in essential features, enjoyed the royal favour in the second century, as it did in later times, and that it was cultivated at the Indian courts. In no case can it be said that the Brahmanic science and literature was extinguished by the invasions and the rule of the barbarian foreigners (as an Indian would say). If we suppose that the *prajastī* informs us of pure historical truth, then its contents clearly show that the life of literature in the second century must have attained to such a richness and strength as to win over to itself even the descendants of barbarians. Thus it naturally follows that the *Kāvya* could not have been a new discovery in the 2nd century, but it must have had a long previous history which went back to the times when Aryan princes were the exclusive rulers of India. For this reason, it would not be certainly going too far to assert that the Gīrnār *prajastī* makes probable the existence of the *Kāvya* style, even in the first century.

A very large number of *prajastīs* go to prove that in the fourth, fifth and sixth centuries, the *Kāvya* literature was in its full bloom and that the *kāvyas* did not at all differ from those handed down to us. The second, independent Gupta king whose reign, no doubt, covered the greatest

⁷⁶ According to my view, what the two inscriptions present, must be looked upon as the minimum of the development of Poesy at that time, and not as the maximum. It appears to me very probable that in the second century, there had been many superior and more elaborate compositions; because the author of the Gīrnār inscription was only an obscure provincial writer, and the author of the Nāsik inscription was only a Court poet of the Andhra king. It is, however, very questionable whether the poetic art had reached, in southern India, that degree of development which it had reached at the special centres of intellectual life, in northern India. It would be a strange chance, indeed, if the two inscriptions presented to us a completely accurate picture of the stage of development in which Indian Poesy was at that time.

part of the second half of the fourth century, Samudragupta-Parākramāṅka, was himself a poet, and received from his admirers the title *Kavirāja*. He supported several poets, who at the same time were Paṇḍits, and put an end, as far as he could, to the old antagonism between the Muses and Plutus. His courtiers followed the example of their master, and the panegyric by Harishena, 'the minister of foreign affairs and the counsellor of the prince royal,' shows that Samudragupta had at least one poet, of whom he had no reason to be ashamed.

Harishena's *kāvya* is in every respect an artistically finished little work, which places its author in a line with Kālidāsa and Daṇḍin. Its style is that of the Vaidarbha School. The very fact that Harishena himself belonged to the north-east of India shows that, there must have preceded his time, a period of literature, during which, poets from Berar in northern Deccan, accomplished much, and brought their particular taste to a high repute. Probably this full bloom of the Vaidarbhas will fall in the third century, or at the latest in the beginning of the fourth century. Under Samudragupta's successor, Chandragupta II.-Vikramāditya, poetry must have similarly enjoyed the patronage of the court, inasmuch as even the king's minister took to himself the title of a *kavi*. The little proof of his art, handed down to us, discloses at any rate great cleverness, if not a real poetic talent as such. Even this little composition is written in the style of the Vaidarbha School. The same holds good of the *praiśasti* of the time of Kumāragupta and Skandagupta. The works in existence are, however, most insignificant, a phenomenon which is satisfactorily explained by the fact that they were all written by provincial writers. In the second half of the fourth century, in Vatsabhaṭṭi's *praiśasti* of the Sun-temple of Daśapara-Mandasor, we see traces of the existence of the school of the Gauṇas, the poets of eastern India. This work should be called rather the exercise of a scholar who busied himself with the study of the *kāvya* literature, than a product of an actual poet. We can see therein that its author had studied the *kāvya*s and Rhetorics, but that, in spite of all the troubles he took to produce a real *kāvya*, he possessed little of inborn talent. Small offences against good taste, such as the use of expletives and tautologous words, are more frequently met with. In one place, the author is led to forget one of the most elementary rules of Grammar, by the exigencies of the metre; in another place, in his zeal to form long compounds, he is tempted to disregard the rule, always observed by good writers, according to which, the weak pause can never come at the end of a half-verse. In a third place, he jumbles together two ideas in a manner the least permissible; and his attempt to bring out a new comparison between the clouds and the houses leads in no way to a happy result.

These defects in Vatsabhaṭṭi's *praiśasti* make it the more important for the historian of literature, inasmuch as they bear testimony to the fact that everything worthy of attention, in the *praiśasti*, is gathered from the literature of his time and compiled into a whole. Thus, on the one hand, we are assured of the fact that about the year 472 A. D., there was a rich *Kāvya* literature in existence; and on the other hand, greater weight is gained by the points of accordance with the works handed down to us, which the *praiśasti* presents. It has been already pointed out above that verse 10 of the *praiśasti* only repeats, for the most part, the comparison contained in verse 65 of *Meghadūta*, with some new points added in a very forced way; while the remaining points contained in that verse of Kālidāsa, find themselves repeated in verse 11 of the *praiśasti*. Further it is to be noted that Vatsabhaṭṭi, like Kālidāsa, shows a special predilection for the word *subhaga*, and that he while describing the king Baudhuvarman, plays upon his name just in the same way as Kālidāsa does with the names of Raghus, whom he describes in the beginning of *Sarga* XVIII. of *Raghuvamśa*. These facts make the conjecture more probable, that Vatsabhaṭṭi knew and made use of the works of Kālidāsa. The same view is advocated by Prof. Kielhorn in a publication⁷⁷ just appearing, which reached me after this treatise was nearly finished. He reads in verse 31 of the *praiśasti* :—

रामासनायनवनीवर नास्करांशु—वद्विषयसुखये

instead of 'भवने वर', and shows that the verse sufficiently agrees with *Nitumāhāra* V. 2-3, in both words and thoughts, as there are only two new points added. Although I am not in a position, without examining a good impression of the inscription, to give a definite opinion regarding the proposed, and no doubt very interesting alteration of the text, still the truth of his

⁷⁷ 'The Mandasor-inscription of the Mālava year 529 (=472 a. d.) and Kālidāsa's *Pitumāhāra*' Göttingen 1890, p. 251 ff.

assertion that verse 31 of the *prāśasti* is an imitation of *Ritusamhāra*. V. 2-3, appears to me quite undeniable. If we may believe in the tradition⁷⁹ which ascribes *Ritusamhāra* to the author of *Meghadūta*, then the point overlooked by me, which Prof. Kielhorn has made out, strengthens the probability of the supposition that Kālidāsa lived before 472 A. D., which is very significant. In that case, however, it will have to be assumed that Vatsabhatti knew the *Ritusamhāra* also.

One of these conclusions,—the statement that the Indian artificial poetry had developed itself not after but before the beginning of our era,—is confirmed also by references in a literary work which is by all means old. Whosoever goes through the collection of poetic citations from the *Mahābhāṣya*, which Professor Kielhorn has brought together *Ante*, Vol. XIV, p. 326 ff., can not but see that the *Kāvya* prospered in Patañjali's times. Many of the verses exhibit metre characteristic of the artificial poetry, such as, *Mālatī*, *Pramitākṣarā*, *Praharṣiṇī* and *Vasantatilakā*. These verses as well as many others⁸⁰ in the heroic *Anuṣṭubha-Sloka* agree, in point of contents as well as the mode of expressions, not with epic works but with the Court *kāvya*s. The composition of the *Mahābhāṣya* can now indeed no longer be placed with certainty in the middle of the second century before Christ, as was the case generally, up till very recently; because the uncertainty of the known arguments of Goldstücker and others has become more and more evident with the time.⁸¹ In the meanwhile, according to what Prof. Kielhorn in his article⁸² 'The Grammarian Pāṇini' has said about the relation of Bhartṛihari and *Kāśikā* to the *Mahābhāṣya*, and for reasons of language and style, we cannot establish for Patañjali a later *terminus ad quem* than something like the first century after Christ. Thus the passages from Patañjali show at any rate, as Kielhorn remarks in *Ante*, *loco citato*, 'that the so-called classical poetry is older than it has lately been represented to be.' A further proof for the early growth of the Sanskrit *Kāvya* is provided by a Buddhist work, the *Buddhacarita* of Aśvaghoṣa, whose Chinese translation was prepared between 414—421 A.D. The work is not a *Mahākāvya* in name only, but is written in the *Kāvya* style, as we may judge from the samples given by Mr. Bendall.⁸³ Mr. Beal the translator of the Chinese version looks upon the Buddhist tradition as right,⁸⁴ according to which, the author, Aśvaghoṣa, was a contemporary of Kanishka (78 A. D.). Even if we lay aside this difficult question and take our stand on the date of its translation, which is beyond doubt, the work would still possess great worth from the point of view of the history of literature. The composition of the work in question can not be placed in any case later than 350—400 A. D. Even the bare fact that a Buddhist monk, as early as this, thought of writing the Legend of Buddha, according to the rules of the poetic art, establishes a great popularity of the brahmanic artificial poetry and confirms the conclusions, arrived at, above, by the analysis of Harishepa's *prāśasti*. A thorough examination of the *Buddhacarita*, and a comparison of its style with that of the older *kāvya*s and with the rules of the oldest manual of Rhetorics will, without doubt, lead to more definite and more important results.

If one compares the conclusions, set forth in this essay, with the views of other Sanskritists regarding the history of Indian *Kāvya*, it will be found that they are entirely incompatible, especially with those which Professor Max Müller has argued out in his famous dissertation⁸⁵ on the Renaissance of Sanskrit Literature; and thus I am not, in this case, in a position to agree with

⁷⁹ This tradition is, at any rate, older than Vallabhadēva's *Saṁskṛtādhikāśikā*, which belongs probably to the first half of the fifteenth century. In it, are quoted two verses from *Ritusamhāra*, No. 1674 (= *Ritus*, VI, 17) and No. 1678 (= *Ritus*, VI, 20) under the name *Kālidāsayoga*. In the note to the first of these, the editors wrongly attribute it to *Kumārāśāṣṭakā* VI, 17. The mistake has been rather due to a misprint. Two other verses from *Ritusamhāra* have been cited in the same anthology, but without a mention of the particular author. Vallabha has probably taken them from some older work on which the author's name was not given.

⁸⁰ In this connection one should notice the quotations from Vol. I, 425, 435; II, 119; III, 147, 338. (Kielhorn's edition of the *Bhāṣya*.)

⁸¹ According to the communication of Paṇḍit N. Bhāskarāchārya, 'The Age of Patañjali, *Adyar Series* No. 1' p. 4, the two old *Mas* from the South are unfavourable to one, historically important, word, not contested till now, inasmuch as they do not read नीरे: but पीरे: in the well-known passage on Pāg. V, 3, 99. Although the treatise mentioned above contains very little else that is noteworthy, still this point requires to be investigated further, especially as Southern *Mas* have not been used for the *Bhāṣya* up till now.

⁸² *Nachrichten für K. u. H. Gesellschaft für Wissenschaften*, Göttingen, 1885, p. 155 ff.

⁸³ *Catalogue of Buddhist Sansk. Mas*, p. 82.

⁸⁴ *Sacred Books of the East*, Vol. XIX, p. XXX, ff.

⁸⁵ *India, what can it teach us?* p. 231 ff. On the other hand, Lassen's views regarding the development of *Kāvya*, come pretty near to the results given above. As he had studied the inscriptions, it was but natural that the significance of the Girnar inscription, and of Harishepa's *prāśasti* did not escape his observation; see *Indische Altertumskunde*, part II, p. 1129 f., 1129 f.

the literary-historical suppositions of my honored friend and to build further on the same, as I have done many times on other occasions. His first proposition, that the Indians did not show any literary activity during the first and second centuries of our era, in consequence of the inroads of the different foreign races, is contradicted by the clear proof provided by the *prajāpti* of the Sudarāna lake and the Nāsik-inscription No. 18. I think, I must further add that the extinction of the intellectual life of the Indians during the first two centuries by the Scythians and other foreigners is improbable for other reasons also. In the first place, never had the foreigners brought under their sway, in the long run more than a fifth part of India. To the east of the district of Mathurā, no sure indications of their rule have been found, and the reports of the Greeks ascribe to the Indo-Scythian kingdom no further extent in the east or south. In India proper, the kingdom could permanently possess only the Panjāb, besides the high valleys of the Himalaya, the extreme west of the North-western Provinces, the Eastern Rājputānā, the Central Indian Agency, with Gwalior and Mālwa, Gujarāt with Kāthiāwār, as well as Sindh. No doubt, temporarily these limits are further extended in several cases, as the inscriptions from the reign of Nahapāna prove for the western border of the Deccan, and several traces of war might present themselves in further removed districts. The rulers of such a kingdom could indeed have exerted a considerable influence, on the east of India, but they would never have been able to suppress the literary and scientific life of the Indians. Secondly, however,—and this is the most important point—the very will to show a hostile attitude towards the Indian culture, was wanting in the foreign kings of the time, as the sayings and authentic documents inform us. They themselves, as well as their comrades of the same race, were far inferior to the Indian, in point of civilisation and culture, and the natural result was that they could not escape the influence of the Indian civilisation, but were themselves Hinduised. Their willingness to appropriate the culture of their subjects is shown by the very fact that the descendants or successors of the foreign conquerors immediately began to bear Indian names, even in the second generation. Huvishka's successor is indeed a Shāhi, but he is named *Vāudera*. Nahapāna's daughter is named *Dakṣamitrā* and his son-in-law, the son of Dinika, a Saka, is named Ushavadāta or Usabhadāta, i. e., *Rishabhādatta*. The son of Chashtana is Jayadāma. The leaning of these kings to the Indian systems of religion is equally indisputable. According to the Buddhist tradition, Kanishka is one of the greatest patrons of Buddhism and even became a Buddhist himself. The latter fact is indeed shown to be improbable by the inscriptions on his coins. On the other hand, there is no doubt that he built a *stūpa* and a *vihāra* in Purnahapura—Peshawar. So also it is proved from the inscriptions that Huvishka had founded a *vihāra* in Mathurā.⁵⁵ Ushavadāta and his consort, according to the Nāsik and Karle inscriptions,⁵⁶ made grants to Buddhists and Brāhmanas without distinction, and the former, just like a pious Indian, carried out numerous works of public utility, for the sake of merit. The Mathurā inscriptions further show that under Kanishka and his successors, by the side of Buddhism, many other systems of religion also, like Jainism, were not only tolerated, but enjoyed a high prosperity. These inscriptions as well as numerous archaeological finds also prove that the national Indian architecture and sculptures in Mathurā were on a high level, and one of the newest discoveries of Dr. Führer permits us to conclude that even the dramatic art was cultivated in the city of gods. The inscription No. 18, out of the collection prepared by me for the next number of the *Epigraphia Indica*, says that 'the sons of the actors of Mathurā (*Mathurdanāśailakāṇan*), who were known as Chāndaka brothers, dedicated a stone-alab, for the redemption of their parents, at the holy place of the adorable Nāga-prince, Dadhikarṇa.' If Mathurā had its company of actors, then it would not have been in want of dramas. All these circumstances make it impossible in my opinion to look upon the times of the Indian popular migration as a period of wild barbarism. The conditions appear to be in no way essentially different from those of the times when there were national rulers. The Indians of the north-west and the west had indeed to obey foreign suzerains and to pay them tributes and taxes; in return for which, however, they had the triumph of exerting sway on their subjugators, through their high culture and of assimilating the same with themselves. The conditions necessary for literary activity must have been in existence, when an Ushavadāta noted his great deeds in a mixture of Sanskrit and Prakrit itself.⁵⁷

⁵⁵ Coningham, *Arch. Surv. Rep.* Vol. III, plate XIV, No. 12. ⁵⁶ *Arch. Surv. Rep. West Ind.*, Vol. IV., p. 80 B.

⁵⁷ *Arch. Surv. Rep. West Ind.*, I. c. No. 3, I. 2. E.

He would certainly have lent his ear and opened his purse to bards and *kavis* who would glorify him. These considerations appear to me to be of importance for the statements in the *Girnār prāśasti* and heighten their significance.

A second proposition which Professor Max Müller in addition to other scholars advocates,—that the real period of the bloom of artificial poetry is to be placed in the middle of the sixth century after Christ,—is contradicted by the testimony of the Allahābād *prāśasti* of Harisheṇa, of other compositions of the Gupta period and of the Mandasor *prāśasti*. These leave no doubt about the fact that there were not one but several such periods of the bloom of the *Kāvya*, of which one fell before the time of Samudragupta, and they also make it probable that Kālidāsa wrote before 472 A. D. The same conclusion is favored by the fact that Dr. Fergusson's bold chronological combinations, on which is based the theory of the Indian Renaissance in the sixth century, have been shown to be insupportable by the researches of Mr. (Dr.) Fleet. The authentic documents going down to the year 533 A. D. know absolutely nothing about the Vikramāditya of Ujjain whose existence is inferred or set up by new interpretations of the different legends, and who is reported to have driven away the Scythians from India and to have founded the Vikrama era in the year 544 A. D., dating it as far backwards as 600 years. On the contrary, they prove the following facts concerning western India. Samudragupta-Parākramāṅka, according to Mr. (Dr.) Fleet's inscription No. II., had extended the kingdom of his father, at any rate as far as Erāp in the Central-Provinces. His son Chandragupta II.-Vikramāditya, according to No. III., conquered Mālwa, before or in the year 400 and also possessed Mathurā. Chandragupta's son, Kumāragupta-Mahendrāditya, held fast these possessions, because, according to No. XVIII., he was the suzerain of the rulers of Daśapura-Mandasor, in the year 437. His son, Skandagupta-Kramāditya or Vikramāditya, according to No. XIV., ruled over Gujarāt and Kāthiāwār, about 455-457 or 456-458. In his time, the Hūṇas came forth, against whom he made a successful stand, according to No. XIII. Later on, however, whether it was in his own reign which lasted at least till the year 467 or 468, or under his successors Puragupta and Narasimhagupta,¹⁹ the most western possessions were lost and went over to the foreign race. In No. XXXVI. and XXXVII. there appear the kings, Toramāṇa and Mihirakula²⁰ as rulers of Erāp and Gwalior, and in No. XXXVII., the latter is said to have reigned for fifteen years. The end of the rule of Mihirakula in these districts, is made known to us through Nos. XXXIII, XXXIV and XXXV, according to which, he was defeated by a king Yaśodharman-Vishṇuvardhana, before the year 533 A. D. These inscriptions represent Yaśodharman as a very powerful ruler who had brought under his sway not only Western India from Daśapura-Mandasor down to the ocean, but also large parts in the east and north. In his possessions, Mālwa was naturally included; whose capital Ujjain lies only something like 70 English miles to the south of Daśapura. In No. XXXV., and in two considerably early inscriptions Nos. XVII. and XVIII., the Mālava era is used, which is identical with the so-called Vikrama era beginning with 56/57 B. C.²¹ These exceedingly important discoveries which we owe to Mr. Fleet's zeal in collecting and his ingenuity, prove the absolute untenableness of the Fergussonian hypothesis. Because they shew—(1) that the era of 56/57 B. C. was not founded in the sixth century, but was in use under the name of the Mālava era for more than a century;²² (2) that at that time, no Sakas could have been driven from western India, inasmuch as the country had been conquered by the Guptas more than a hundred years ago; (3) that, on the contrary, other foreign conquerors, the Hūṇas, were driven on²³ of western India in the first half of the sixth century, not, however, by a Vikramāditya, but by Yaśodharman-Vishṇuvardhana, and (4) that, therefore, there is no room at all in the sixth century, for a powerful Vikramāditya of Ujjain, whose exploits called forth a national upheaval in India.

¹⁹ See Dr. Hoernle, *Jour. Beng. As. Soc.* Vol. LVIII, p. 83, and Mr. Fleet, *Ante* Vol. XIX, p. 224.

²⁰ See also Mr. Fleet's article on Mihirakula, *Ante* Vol. XV., p. 245 ff. and on Toramāṇa, *ibid.* Vol. XVIII, p. 225. With Dr. Hoernle (*l. c.* p. 93, Note 2) I hold that Vishṇuvardhana is a second name of Yaśodharman, as is shown by the grammatical construction.

²¹ See also *Ante* Vol. XV, p. 191 ff. and Vol. XIX, p. 56, in which latter place, Prof. Kielhorn has given the right explanation of the difficult expression *Mālavādāt* or *Mālava-papasthiti*.

²² As is quite clear, the Mālava era has suffered the same fate as the Saka era and came to be known by another name, as its origin was forgotten. The change of name appears to have come in about 800 A. D. The latest known Mālava date is the year 795, which appears in the Kāgaswa inscription, *Ante* Vol. XIX, p. 55 ff. Apart from the two doubtful documents, the oldest known Vikrama date is found in Dr. Hultzsch's Dholpur inscription, and corresponds to 16, April 643, as Prof. Kielhorn has shown, *Ante* Vol. XIX, p. 35.

²³ If it occurs to any one to conjecture that the Hūṇas had caused an interruption in the literary activity of India, I bring to his notice the fact that both the inscriptions of the age of Toramāṇa and Mihirakula contain no mean compositions and that their authors glorify the foreign kings as highly as if they had been the national rulers.

Thus, when, with the fall of the Vikramāditya set up by Dr. Fergusson, it becomes no longer possible to place in the sixth century, on the same grounds, the writers, whom legends connect with a Vikramāditya, the view which holds that the leaders of the Indian poetic art belonged to this period, will be also compelled to support itself by other arguments and to produce a proof for every one of these writers in particular. What has been adduced, in this connection, about Kālidāsa—in whom alone we are interested here—is, in my opinion, not sufficient to make out even the bare probability of such a fixing of the age. The well-known but hardly accredited verse⁹⁰ which mentions Kālidāsa as one of the nine jewels at the court of the Vikramāditya, and which makes him a contemporary of the astronomer Varāhamihira, loses all its value. The Vikramāditya referred to in the verse is, as the *Jyotirvidyābhāṣya* shows, the legendary founder of the era of 56-57 B. C. So long as the history of western India was absolutely unknown, it was at least possible to conjecture that the writers named in the verse would have been contemporaries and lived under a Vikramāditya—whose time was wrongly put later—and that their actual age ought to have been inferred from the sure date of Varāhamihira. But now when we know that in the first half of the sixth century, there never existed a Vikramāditya of Ujjain, it naturally follows that the legend is the more defective. It would be more than a venture to hold as historically true what remains of the legend, namely, the simultaneity of the nine writers.

A second argument⁹¹ which is based on Mallinātha's explanation of *Meghadūta*, verse 14, can also hold little water, in that it requires us to assume many things, no doubt, possible, but incapable of proof, and its conclusion is opposed by important considerations. One must, to begin with, take it as proved that Mallinātha was right in asserting that in the passage in question, Kālidāsa, in the word *dignāgādānā* referred to a hated opponent, further that this opponent is identical with the Buddhist teacher Dignāga, so also, that this latter was the pupil of Vasubandhu or Asaṅga,⁹² as the Buddhist tradition goes according to Tārānātha and Ratnadharmarāja. Then comes the last and the most questionable link in the chain, i. e., the assigning of the year 560 or so to the two brothers Vasubandhu and Asaṅga, which derives its main support from the untenable theory of the great Vikramāditya of the sixth century. This assumption, as Professor Max Müller himself admits, is contradicted by a Chinese account according to which, Kumārajīva translated the works of Vasubandhu in the year 404 A. D. The same is further contradicted by the tradition mentioned by Mr. Bunyin Nanjio, that the same Kumārajīva translated the life of Vasubandhu, as well as in my opinion, by the existence of Chinese translations of Vasubandhu's works, in the years 508, 509, 508-11 (Bunyin Nanjio *Catalogue*, Nos. 1168, 1194, 1293).⁹³

A third argument⁹⁴ which is based on the assumption that Kālidāsa must have lived after Āryabhaṭa (who wrote about 499 A. D.) just because he shows an acquaintance with the scientific astronomy borrowed from the Greeks, has fallen down to the ground, owing to the results of the newest researches. Professor Max Müller, in addition to the views of earlier scholars, held that Āryabhaṭa was the father of scientific Indian astronomy, and assigned the five Siddhāntas selected by Varāhamihira to the sixth century. But this is quite a mistake, according to Dr. Thibaut's thorough examination of the question in the introduction to his edition of the *Pañcha-siddhāntikā*. Of the five Siddhāntas, two, *Paitāmaha* and *Vāsiṣṭha*, have nothing to do at all with the astronomy borrowed from the Greeks. Of the remaining three, two, *Romaka* and *Paulīṣa*, are more incomplete and older than the one ascribed to Sūrya, and all the three, in their form, go backwards even before Āryabhaṭa's works. They are also treated by Varāhamihira, with greater respect than Āryabhaṭa and other individual astronomers. These and other considerations lead Dr. Thibaut to fix the year 400 A. D. as the *terminus ad quem* for the *Romaka* and *Paulīṣa*.⁹⁵ Thus it is no longer necessary to assign Kālidāsa to the sixth century just on the ground that he is acquainted with Greek astronomy. I must still further add that the assertion made by

⁹⁰ I purposely speak of the verse only. For, in my opinion, it is not advisable to refer to the Gayā inscription translated by Sir Ch. Wilkins (*As. Res.*, Vol. I, p. 284), but now lost, as a proof for the existence of a tradition of the Nine Jewels. Whoever compares the translation (Murray's *Travels in Portugal*) of the Cintra-inscription by the same learned gentleman with the original, will certainly agree with me in that his word is not sufficient to afford us the certainty that the Gayā inscription contained such a striking statement as that of the Nine Jewels.

⁹¹ India, what can it teach us? p. 300 ff.

⁹² The two Tibetan writers contradict each other on this point. Tārānātha says, (*History of Buddhism*, p. 131), that Dignāga had been a pupil of Vasubandhu. The second account belongs to Ratnadharmarāja. The older Chinese writers are not aware of this tradition.

⁹³ Mr. Beal, according to his note 77 to his translation of the *Siyuki*, Vol. I, p. 165, appears to have doubted the fact that Vasubandhu lived in the sixth century A. D. Compare also Note 26, p. 106, where Mr. Beal shows that Vasubandhu, according to Hsien Tsang, lived 'in the middle of' or 'during' the period of 550 A. D. c. 650 A. D.

⁹⁴ India, what can it teach us? p. 318 ff.

⁹⁵ In a recent article on the *Romaka Siddhāntas*, *Asiatic Researches*, Vol. XIX, p. 133 ff., Mr. S. P. Dikshit goes still further and fixes the time of Ptolemy 150 A. D. as the *terminus ad quem* for the old *Romaka*. Dr. Thibaut also says, l. c. p. LII—LIII, that the *Romaka* can be older than Ptolemy, although there lies no conclusive ground for the supposition. Compare, in this connection, Dr. Burgess *Asiatic Researches*, Vol. XIX, p. 287.

Mr. S. P. Pandit and Professor Max Müller, that Kālidāsa in *Raghuvamśa* XIV., 40, traced the lunar eclipse to the shadow of the earth, rests on a misunderstanding. Kālidāsa, there, speaks of the spots on the moon, which as the *Purāṇas* teach us, are called into being by a reflection of the earth.¹⁰⁰ As for the eclipse, he is quite orthodox, as is to be expected of an Indian poet.

A fourth argument, on which Dr. G. Huth lays some stress, in his investigation about Kālidāsa,¹⁰¹ carried out with much labour, rests on the mention of the Hūṇas, amongst the frontier peoples of India, in *Raghuvamśa* IV, 68. Dr. Huth thinks that it can be assumed that Kālidāsa has transferred the conditions of his time to that of Raghu, and that by the Hūṇas are meant, the White Huns. These possessed Kābul twice, once from the end of the second century B. C. to the end of the second century A. D., and again from the beginning of the fifth, to the end of the sixth century. Now as it is impossible on various grounds that Kālidāsa should have lived at the time of the first possession, so, Dr. Huth further concludes, he must have belonged to the second period, and that naturally the sixth century should be the *terminus ad quem*. The information provided by the Gupta inscriptions, regarding the history of the Hūṇas in India, would very much modify this conclusion. But it is not at all necessary to go into further details, for there is no difficulty in showing the improbability of the very first proposition in the argument, which has not been proved. Indian poets, even when describing the triumphs of historical kings, their very masters and patrons, are frequently quite inaccurate in their geographical and ethnographical accounts, and instead of giving actual facts, they take their stand on the traditional accounts in the epics, *Purāṇas* and other older works that describe *digvijayas*. Thus Vākpati (about 740 A. D.) makes his master and hero, Yaśovarman of Kanauj to conquer the Pārasikas, although the Persian empire was then no longer in existence. Similarly, Bilhana, in the *Vikramādikāchārīta* XVIII., 34, describes Ananta of Kaśmīr as conquering the Sakas, and further in 53-57, his son Kalaśa, as conquering the kingdom of the Amazons (*strīdīpa*) after a ride through the ocean of sand, as well as visiting the Kailāsa, the Mānasa lake, and Alakā the city of the Yakshas. In the face of these facts, it is hard to believe that Kālidāsa, instead of following, as a good *kāvi* is supposed to do, the authority of the lists of peoples, in the *Mahābhārata* or of the *Bhuvana-vinyāsa* in the *Purāṇas*, should have occupied himself with the historico-geographical investigations regarding the conditions of the frontier peoples of his time. If we look into his works more carefully, we shall find that they contain much that points to his having made use of the sources mentioned above. The whole of the *digvijaya* contains no names which are not also mentioned in the *Purāṇas* on the same or similar occasions. It also mentions, side by side, peoples like the Pārasikas (verse 60) and the Yavanas (verse 61), the Hūṇas (verse 68) and the Kāmbojas (verse 69), which can never justly belong to the time of the poet, why even to no single period of time whatever. The Greeks have never been simultaneous neighbours with the Persians; and surely the Greeks have never possessed the North-west frontier of India in years after the birth of Christ. Further, even if the Hūṇas rushed into India, through Kābul and possessed the country, still it is not intelligible how a writer who took his stand on historic facts can mention both the subjugators and the subjugated side by side, as independent peoples.

As for other so-called arguments for the supposition that Kālidāsa belonged to the sixth century, I pass them over; because they are open to similar and even greater objections than those dismissed above. I do not believe that the question of the time of Kālidāsa and of other leaders of Indian poetic art whose dates have not been fixed by actual historical documents, will make an essential advance, by such methods as have been followed up till now, by most of the Sanskritists. In order to arrive at certain conclusions, we must thoroughly investigate the language, the style and the poetical technics of single works and compare them with those of works whose dates have been known with certainty or with approximate definiteness, and of epigraphical documents, as well as with the canons laid down in the older manuals of poetics. If we will extend the scope of our work to the epics also, we will be able to have quite a complete picture of the gradual growth of Indian Poetry. Such investigations of which a beginning has been made, especially in the works of Prof. Jacobi, naturally fall outside the limit of this essay whose only aim is to point out in a general way, the significance of the study of the inscriptions, for the *Kāvya* literature.

¹⁰⁰ Compare, for instance *Vishvavidharmottara* I, 29, 16 f.:-

स्वद्विम्बे निर्मले पृथ्वी सखिलवनकानना ॥ ११ ॥

सद्यःकृतिः सदा वृद्ध्या सद्यस्तन्नास्वतोत्तम ।

तेनेव कारयेन स्वमुच्यसे मृगलाञ्छनः ॥ १२ ॥

The verses are found in a hymn to the moon.

¹⁰¹ On the Age of Kālidāsa. p. 30 ff. (Inaugural Dissertation) Berlin 1890.

SOME MAXIMS OR NYAYAS MET WITH IN SANSKRIT LITERATURE.

BY PROF. V. S. GHATE, M.A.; POONA.

I propose to point out some Sanskrit *nyāyas* or maxims, which I have come across in the course of my reading, but have not found mentioned in Col. Jacob's *Laṅkā-nyāyāṅguli*. So also I would like to cite a few more references or passages in which some of the *nyāyas* already noticed by Col. Jacob occur.

अदग्धदहनन्याय—the maxim of burning what is not already burnt. When one thing, mentioned in connection with a second, is transferred to a third thing, because it is required by this last, but is not so required by the second thing which is possible even without it, then this maxim is said to be applicable. The *nyāya* is referred to in Rāmācharaṇa's commentary on *Sāhitya-darpaṇa* (Nirṇaya-sāgara, edition 1904) p. 532. The passage runs thus—'वयाख्याते स्थिता विधिप्रवृत्तयो-स्वयंस्वान्वयपादित्वे तत्रानुपयोगिनी अदग्धदहनन्यायेन पक्षान्तरस्य विधेयतायामुपयोगं लभमाना पक्षान्तरे संचार्यते तयात्रापीति भावः।' In the instance, इमा जुहोति, though the injunction (*vidhi*) should grammatically refer to the act of sacrificing or offering (*harana*), still, as *harana* is not in need of such an injunction, being, in fact, a matter of course, the injunction refers to curds or *dadhi*. Thus what is practically enjoined in the sentence in question is not the offering but curds as the material offered.

हेमाविन्दपरिमलन्याय—the maxim of a golden lotus possessing fragrance. When a thing already possessing a good quality, which alone makes it highly valuable, is found to possess another good quality in addition, it is a very happy combination, just like a lotus which is golden and which also possesses fragrance. This maxim is referred to by Vīrarāghava in his Commentary on *Uttarāraṇacharita* (Nir. Sāgara-ed.), page 24. Rāma says 'वृत्तिद्वयेन । जनकानां रघूनां च संबन्धः कस्य न विद्यः etc.' on which the commentator remarks 'वृत्तिद्वयमिति । हेमाविन्दपरिमलन्यायादिति भावः।' I think, this हेमाविन्दपरिमलन्याय practically corresponds to the Marāṭhī—'घुषांत साखर पडली'.

घण्टालालन्याय—The maxim of the tongue of a bell. Just as the tongue of a bell is free to strike either way, in the same way, when a word on account of its position in the middle can be construed either with the preceding or with the following sentence, this maxim is said to be applicable. This maxim is referred to by Mallisena in his *Syādvādamāñjarī* (Chau. Sk. Series), p. 35—'अथ च यथापि मध्यवर्तिनो नकारस्य घण्टालालन्यायेन योजनार्थान्तरमपि स्फुरति यथा इमाः कुहेवाकविदम्बनास्तेषां न स्वुर्वेषां स्वमनुशासकः etc.' The part of the original verse commented upon is 'इमाः कुहेवाकविदम्बनाः स्वुस्तेषां न येषामनुशासकस्त्वम्।' The commentator has first construed न with what follows, thus the sentence being इमाः कुहेवाकविदम्बनाः तेषां न स्वुः येषां त्वं न अनुशासकः (These obstinate and ridiculous assertions would be made by them, of whom you are not the teacher); then he says that a second interpretation is possible by construing न with what precedes, thus the sentence being—इमाः कुहेवाकविदम्बनाः तेषां न स्वुः येषां स्वमनुशासकः (These obstinate and ridiculous assertions would not be made by them of whom you are the teacher). Of course it will be seen, that practically both the interpretations give the same meaning. This घण्टालालन्याय is to be distinguished from the more familiar देहलीदीपन्याय. The tongue of a bell can strike either side, but only one at a time; whereas the lamp on a threshold can light both the inside and the outside of a house simultaneously. Thus to take a particular instance, a word in the middle position can be connected at a time with either what precedes or with what follows according to the घण्टालालन्याय, while it can be connected with both simultaneously according to the देहलीदीपन्याय, as, for instance, in the phrase 'पितृमहमहेन्द्राभ्यां रक्षितस्वानिलेन' च रक्षितस्य is connected simultaneously with both the preceding and following words.

कोशपापप्रत्यायनीय—the maxim of believing in a thing only on oath, as is taken at the time of drinking from a goblet. When one is asked to believe in a thing which does not stand the test of reason, this maxim is applicable. It is referred to in *Syādvādamāñjarī* (Chau. Sk. Series), p. 27. द्वितीयविकल्पे पुनरुदयशरीरे तस्य महात्मविशेषः कारणमाहोस्विदस्मदाद्यद्वेमुष्यं । प्रथमप्रकारः कोशपापप्रत्यायनीयः तत्सिद्धौ प्रमाणमावाहः ।

मण्डूकजटाभारन्याय—the maxim of the burden of the matted hair of a frog. Anything, which is void of an independent existence, and is still supposed to exist independently, is said to resemble the matted hair of the frog. I think it very much corresponds to castles in the air (छपुष्य,

सद्यविद्या etc.). The proverb is referred to in *Syāddedāmañjarī* (Chau. Sk. Series), p. 104—किं चानि विद्येयाः सायान्वादिता अभिज्ञा वा । निजान्धेनमप्यहंकृत्यमापनुकाराः ।

प्रासादवासिन्याय—the maxim of those living in a palace. It is mentioned and fully explained in Patañjali's *Mahābhāṣya*, on the *sūtra* मुखनासिकावचनोऽनुनासिकः (Nirṇay Sāgara ed., pt. I., p. 166). The point in question is that the *Anusāsik* may be either called *mukharachana* or *anasikachana*, because they are both; thus any one of the words *mukhar* or *anasik* being sufficient for the purpose in the *sūtra*, just as those who live both on the ground and in a palace may be called either *pradāda-edsinah* or *bhūmi-edsinah*. The passage in the *Mahābhāṣya*, which is quite intelligible by itself, runs thus:—मुखमहं सख्यमकर्तुम् । केनेहानीमुनयवचनानां भविष्यति । प्रासादवासिन्यायेन । तथापि—केचित्प्रासाद-वासिनः केचिद् भूमिवासिनः केचिदुदयवासिनः । तत्र ये प्रासादवासिनो गृह्यन्ते ते प्रासादवासिमहनेन । ये भूमिवा-सिनो गृह्यन्ते ते भूमिवासिमहनेन । ये उदयवासिनो गृह्यन्ते एव ते प्रासादवासिमहनेन भूमिवासिमहनेन च । एवमि-हापि केचिन्मुखवचनाः केचित्नासिकावचनाः केचिदुदयवचनाः । तत्र ये मुखवचना गृह्यन्ते ते मुखमहनेन । ये नासि-कावचना गृह्यन्ते ते नासिकामहनेन । ये उदयवचना गृह्यन्ते एव ते मुखमहनेन नासिकामहनेन च ।

क्रियाविभागादिन्याय is a maxim of a more technical character, and is based on the well-known principle of the Naiyāyikas, stated in the words क्रिया, क्रियातो विभागः, विभागात्पूर्वैरवसंयोगनाशः उत्तरेष्वसंयोगोत्पत्तिश्च. From activity there arises a disjunction, which leads to a destruction of the conjunction with the former place, ultimately resulting in the production of a conjunction with a new place. This maxim is referred to by way of illustration by Sridhara in his *Nyāya-kandali* (Vis., Sk. Series) p. 33, thus—शरीरान्ते परमाणव एव कारणं न युक्तशोणितसन्निपात क्रियाविभागादि-न्यायेन तयोर्विनाशे सत्युत्पन्नपाकजैः परमाणुभिरारम्भात्. So also on the next page of the same book we have अदृष्टवशात्तत्र पुनर्जडरानलसम्बन्धात् कललारम्भकपरमाणुद्वय क्रियाविभागदिन्यायेन कललवतीरे नष्टे सत्युत्पन्नपाकजैः कललारम्भकपरमाणुभिरदृष्टवशादुपजातक्रियैराहारपरमाणुभिः सह सम्भूय शरीरान्तरारम्भयते.

So far the *nyāyas* not mentioned in the *Laukika-nyāyāñjali*. Now I proceed to add some more passages illustrative of the *nyāyas* already mentioned therein.

सुन्दोपसुन्दन्याय is mentioned in *Tarkabhāṣā* (edited with the com. *Nyāyapradīpa* at Benares (p. 188), in the section dealing with *Sabda*. तत्राद्यनन्धनशब्दाः कार्यशब्दानाद्याः । अनन्धस्तूपान्त्वेन उपान्वयस्त्वन्त्वेन सुन्दोपसुन्दन्यायेन विनश्यते । The *nyāya* is also mentioned in *Syāddedāmañjarī* (Ch. Sk. Series), p. 190. परस्परस्माद् भ्रंसन्ते विनाशमुपगच्छन्तीत्येवंशीलाः सुन्दोपसुन्दवादिनि परस्परभ्रंसिनः ।

घटकुटीरान्तन्याय is mentioned in *Syāddedāmañjarī* (Ch. Sk. Series), p. 33—कर्तृजन्येन विमुचनवैधर्म्येऽपि विशिष्टहेतु कविटपष्टिकल्पनायाः कटेककलत्वाहस्त्वन्तर्निवाङ्गीकृतं प्रेक्षावता । तथा चायातोऽयं घटकुटीर्यां प्रभातमिति न्यायः ।

अर्धजलन्याय is referred to in *Mitabhāṣinī*, the commentary on Sivaditya's *Saptapaddarths* (Vis., Sk. Series), p. 26—अनु तर्कोदीनां यदि संशयेऽन्तर्भावस्तर्हि तद्वक्तव्येनैव तेषां लक्षितत्वाद् न पृथग्लक्षण-विधानं युक्तम् । अन्तर्भावोऽपि तर्कोदितानां तद्वक्तव्यमिति चेदुदाहरति तदाह—नार्धजलन्यायो युक्तः । The spirit of the *nyāya* is quite clear here. It means that if a principle is to be applied, it should be applied uniformly to all cases and not partially. The अर्धजलन्याय is also referred to in the same sense in *Syāddedāmañjarī* (Ch. Sk. Series), p. 46—तत्किमिवमर्धजलन्यायं व्युत्पादितं एव सत्तायोगो नेतरं च इति. Śaṅkarācārya also refers to it in his *bhāṣya* on the *Chāṇakya Upamāśad* (Anand. Sk. Series), p. 257, thus—सुन्दोर्विज्ञानार्थयोः प्रथमप्रतिवचनयोः प्रकल्पस्य विज्ञानार्थस्या-र्धजलन्यायो न्यायो न युक्तः कल्पचित्तम् ।

Very similar in meaning to this *nyāya* is the अर्धवैशसन्याय, which is thus referred to by Sridhara in his *Nyāyakandali*, the commentary on *Prāśastapāddabhāṣya* (Vis., Sk. Series) p. 6 किंच प्रयोक्तुमन्विते श्रुत्यन्तिः श्रोतुमानन्विते अनन्वत्युत्पन्नानां न सद्यैव प्रत्येति । तत्रापि गणकसद्वत्त्वान-न्वितार्थस्त्वान्वितार्थत्वं च पुरुषवैशेत्यर्थवैशसमापतितम्.

पृष्ठ-पादिकान्याय is referred to in the same book (p. 59) —अस्याः सञ्ज्ञाया विना विनिर्दिष्टेन पृष्ठ-पादिकया संकेतः सा पादिकाधिकी यथायं देववच इति.

अन्वयजन्याय which Col. Jacob had not met with in literature for a long time, is referred to in *Syāddedāmañjarī* in two places—नहि कश्चिदकशचित्केनचित्त्वानान्यं विशेषविनिरूपयन्मुमुक्षुते विशेषा वा लहिनाकृताः केवलं पुनरेवमावितमत्त्वानिगोह्यसाविकपदमप्यान्वयजन्यापदमन्ति साविताः सोऽवमन्धराज-न्यायः । (p. 107, Ch. Sk. Series); अनन्तधर्मोक्तस्य वस्तुनः सर्वेनयान्धकेन स्वाहारेण विना यथायद् यतीतु-वस्तुत्वादिदस्याऽन्वयजन्यायेन पक्षवपदितायतज्ञात् । (p. 160).

MISCELLANEA.

(1)

ASIATIC'S ORIENTAL RESEARCH.

THE value of co-operation of Asiatic scholars in the prosecution of oriental research has begun to be realised. We have already a couple of works of authority in which Indian and Japanese scholars of note have collaborated. The Vth volume of the *Encyclopedia of Religion and Ethics* contains a number of contributions by Asiatics. This important book of reference is likely to remain a standard work for a long time. It therefore needs little apology to indicate such slips as have inadvertently appeared there. In the Vth volume speaking generally one misses the master hand of Vallee Poussin in the treatment of Buddhist subjects so well represented in the first four volumes.

Parsi subjects are treated with the usual conspicuous ability of Dr. Hastings' colleagues. There is however a curious error in the article on "Parsi disposal of the dead" by Dr. Lehmann, a correction to which will perhaps appear in a subsequent volume. Dr. Lehmann is made to say "the Parsis of to-day bring the dead bodies of men and dogs to the tower of silence." The Parsis have some religious veneration for the dog, but they certainly do not carry its dead body to the tower of silence.

(2)

A work of equal authority and value as the above *Encyclopedia of Religion and Ethics*, though perhaps appealing to a more limited public, the great *Encyclopedia of Islam*, is slowly progressing, being published simultaneously in English, French, and German. Some of its articles are invaluable monographs, which if reprinted separately would enjoy a deserved wider popularity. Here and there the work is responsible for curious lapses. For instance under the heading of Baku (*Encyclopedia of Islam*, p. 609) we find the following: "The main assumption that the naptha wells of Baku with the eternal fire played an important part in the fire worship of Persia likewise rests on no historical foundations; the fire worship was not brought here till the XVIIth century by Indians and Indian Parsis." The portion I have put in italics certainly rests on no historical foundation. It would be highly interesting to know if Parsis from India ever visited the Baku springs in sufficient numbers to establish the so-called fire worship there.

This Mammoth collection of Moslem information includes much that pertains to ancient Iran. One however would be justified in looking for (what he does not find there) an article on that unusually interesting book the *Bilawher va Budasf* which enjoys the unique reputation shared by two other books only, (*the Kalila wa Dimna* and a

third one of which nothing remains except a bare mention in the *Fihrist of as-Nadhis*) of being an Arabic translation of a Pahlavi version of Indian origin. (see Horowitz's all too brief para at p. 663.)

Among the great lost books of the world the *Khudai-nameh*, the official history of pre-Moslem Iran, composed in Pahlavi, and forming the mediate or immediate basis of the epic of the *Shahnameh* of Firdausi enjoys a unique position. The last word has not been said on this fascinating book. All the available material on its origins is to be found in Mohl's introduction, in Noeldke's *Das national-epos of Iran*, and in the less known but scarcely less exhaustive monograph of the late great Russian Iranist Baron Rosen, *Ka voprosy ob Arbs. perevodakh Khudai-nameh* (i.e., on the question of Arabic translation of the *Khudai-nameh*). Two facts of arresting interest in connection with the celebrated book deserve to be better known in the West. The *Khudai-nameh* has been noted as mentioned by Arab chroniclers of Iran like Hamza of Ispahan, but so far as I know no reference to it has been detected in any Pahlavi Iranian work by Western scholars. It is clear however that *Khudai-nameh* does occur in the celebrated *Bundahesh*, a reference which escaped the notice of Dr. West, who mistook its proper name for a couple of common nouns. (*S.B.E.* Vol. V., p. 147).

From the lengthy introduction by Dr. J. J. Modi to the *Madigan-i-hazar Dadiatus* (p. 44) we learn that the *Khudai-nameh* was still extant in Persia about ten years ago, and that it was in the possession of an old Iranian woman, who valued it above all money out of superstitious regard for it, but could not unfortunately be prevailed upon under any circumstance to part with it. She looked upon it as an ancient heir-loom, the disappearance of which from her house was certain to bring down the wrath of heaven. The large volume, with its number of loose leaves, for which she betrayed little solicitude rested in her wine-cellar, which was opened every Naoruz day and locked up again. The late Parsi Pahlavi scholar Ervad Tehmuras D. Anklesaria, endeavoured his best to secure even a transcript of this *Khudai-nameh*, but without success. Since the death of Mr. Anklesaria all trace of the Iranian woman and her son-in-law, through whom the MS. was attempted to be secured, has disappeared. This must give hopes to the disinterested devotees of Iranian antiquities in the West for the recovery of the priceless history, if not also of other similar works of old Zoroastrian Iran. If the *Khudai-nameh* existed at the end of the last century, there is strong presumption that it and works of its genre may still be awaiting in a corner of Persia the adventurous and learned search of a Westergaard or Jackson.

G. K. NARIMAN.

THE OBSOLETE TIN CURRENCY AND MONEY OF THE
FEDERATED MALAY STATES.

BY SIR R. C. TEMPLE, BART.

(Continued from p. 239.)

APPENDIX. VI.

An Achin Kupang or Five Doit Piece.⁸⁰

Dr. Hanitsch, *J. R. A. S.*, Straits Branch, No. 39, p. 197 f., says that there was found at Malacca in 1900 "a copper coin, probably one *duit*, of the following description:—Obv., coat-of-arms consisting of a crowned shield enclosing a lion rampant, with the figures 5 and 1/16 to the right and left of the shield respectively. Rev., the legend *Indiæ Batav 1816*." That is, the coin bears the arms of the Dutch E. I. Co. and was struck in Batavia. "Coins identical with it, except for the date, were issued by the Batavian Republic previous to the English occupation of Java, and by the Dutch Government after the English occupation, and the Raffles Museum contains such coins of the year 1802, 1818, 1819, 1821 and 1824. The Museum also contains a coin of 1815; that is, a coin struck in Batavia with the Dutch coat-of-arms during the time of the English rule. Therefore it is possible that the above coin of 1816, found at Malacca, may also have been struck under English rule. I cannot offer any explanation of this. A coin of this kind, but of the year 1802, is figured in Netscher and Chijs, pl. VI. fig. 39 (*De Munten van Nederlandisch Indië*, 1863). The figures 5 and 1/16 to the right and left of the shield respectively are somewhat mysterious. Netscher and Chijs (p. 108) say they are not able to offer any explanation of their meaning."

The coins in question are dated 1802—1824 and therefore the following quotation from Kelly's *Cambist*, 2nd ed., 1835, Vol. I., p. 97, applies to them. "Acheen in the Island of Sumatra. Accounts are kept in tales, pardows, mace, copangs and cash. A tale is 4 pardows, 16 mace or 64 copangs. The coins of the country are mace and cash. The mace is a small gold coin weighing 9 grains and worth about 14d sterling. The cash are small pieces of tin or lead, 2500 of which usually pass for a mace, but this number often varies." This scale of money of account was of long standing in Achin: see Stevens, *Guide to E. I. Trade*, 2nd ed., 1775, p. 87, who makes almost the same statement as Kelly. It goes back in fact a long way in the Malay countries: see Bowrey, *Countries round the Bay of Bengal*, Hak. Soc. ed., p. 280 f., writing about 1675.

From the statements above quoted we can extract the following results:

A. Achin Currency.

40	cash	make	1	kupang
4	kupang	"	1	mas
4	mas	"	1	pardao
4	pardao	"	1	tahil

2560 cash to the tabil

640 cash to the pardao

B. Value of mas and pardao.

1	mas	equal	14d.
1	pardao	"	56d = 4s. 8d.

⁸⁰ See ante, p. 37.

Therefore the *pardao* was a dollar of account (rix dollar, *reichsthaler*) reckoned at 640 cash.

C. Value of the coin.

5	duit (kēping)	make	1	kupang = 6½ cents
16	kupang of Achin	„	1	pardao = 100 cents

Therefore the Achin *kupang* was the *kēndēri* of the old Dutch popular currency (see *ante*, p. 86). Therefore also the coins represent the *kupang* (*kēndēri*) of Achin, which was 1/16 of a *pardao* or rixdollar of 640 cash, and was worth 5 duit (*kēping*) of 1½ cent. Hence the figures 1/16 and 5 on the coins.

The coins appear to have been struck for the convenience of the Achin trade, then very important. Historically Achin does not seem to have been so closely under British rule as Java was, during 1811-1816, and on the restoration of Java to the Dutch "a good deal of weight was attached by the neighbouring British Colonies to the maintenance of influence in Achin. In 1819 a treaty of friendship was concluded with the Calcutta Government, which excluded other European nationalities from fixed residence in Achin. When the British Government, in 1824, made a treaty with the Netherlands, surrendering the remaining British settlements in Sumatra in exchange for certain possessions on the continent of Asia, no reference was made in the articles to the Indian treaty of 1819; but an understanding was exchanged that it should be modified, while no proceedings hostile to Achin should be attempted by the Dutch." (*Encyc. Brit.*, 11th ed., I. 145). It is quite possible, therefore, that the British Government issued the *kupang* or 5 *duit* piece for the Achin merchants as well as the Dutch Government, and its use of the Dutch arms can be accounted for by the almost universal custom of the retention by a new Government of a well-known, even though inappropriate, design on coins meant for popular use.

The coin is not likely to have been intended for Java currency, as at that time "in the local currency of Java, 10 copper doits made one *wang* (a small silver coin) and 12 *wang* one rupee" (*Raffles, Java* II. App. x., p. 166). Therefore, if intended for Java currency, a coin of 5 doits would equal 1/24 rupee or 1/38 rixdollar, as the rixdollar was then in Java equal to 190 doits (*op. cit.* p. 167). These proportions do not fit in with the statements on the coin.

It is interesting to note that 5 and 1/16 represents a very ancient proportion in India. The oldest copper coinage known there, the *purāṇa*, *paṇa*, *kārahāṇa*, or current copper cash, was based according to Cunningham, *Coins of Ancient India*, p. 46, on the cowry by tale, and on the *raktikā* or *rati* (= *abrus pectoratus*) by weight, the cowry being equated to the *rati*. On this basis the tale of the actual copper coinage ran as follows:—

grains	cowries or raktikās	paṇa	names
9	5	1/16	
18	10	1/8	ardhakāṇi
36	20	1/4	kāṇi
72	40	1/2	ardhapāṇa
108	60	3/4	
144	80	1	paṇa, kārahāṇa

"The old copper punch-marked coins of copper and all the one-die [oldest] coins from Taxila were *paṇas*."

This exhibits a most interesting comparison.

Scale of modern gold coins in Sumatra.			Scale of ancient copper coins in India.	
9	grains	= māś	= 1/4	kāṇi
36	„	= pardao	=	kāṇi
144	„	= tahl	=	paṇa, kārahāṇa

(To be continued.)

EPIGRAPHIC NOTES AND QUESTIONS.

BY D. B. BHANDARKAR, M. A.; POONA.

(Continued from Vol. XLII. p. 163.)

XIX.—Asoka's Rock Edict I. Reconsidered.

Eleven years ago I contributed a note to the *Journal* of the Bombay Branch of the Royal Asiatic Society¹ on Asoka's Rock Edict I., and therein showed what the true sense of the word *samāja* was and why it was that the Buddhist monarch spoke of it in an edict connected with the preservation of life. I am glad to find that my view has now been generally accepted.² I have, however, since I wrote last about it, found many more references to *samāja*, which are interesting and which throw light, in particular, on the passage *asti pi chu ekachā samājā sādhumāḍ Devānāḥ-priyasa Priyadasino*, which I then was not fully able to comprehend. The last portion of the edict wherein he makes mention of hundreds of thousands of animals slaughtered every day in his royal kitchen was also not quite clear. I, therefore, make no excuse for considering this edict again, and, above all, making a somewhat detailed discussion about the word *samāja*.

I have in my last article on the subject cited a passage from the *Harivaṃśa*, which represents Kṛishṇa to have held in honour of the god Bilvodeśvara a *samāja*, which "abounded in a hundred (varieties) of meat and curry, was full of diverse (kinds) of food, and surcharged with condiments." *Samāja* was thus a public feast where meat formed one of the principal articles of food served. This is one sense of the term, and doubtless shows why Asoka took objection to such a kind of *samāja*. But there is another sense of the word which indicates that there was a second kind of *samāja* where no animal life was sacrificed and which could not consequently have been disapproved by him. No less than three descriptions of such *samājas* I have been able to trace in the Brahmanic literature. One of these has been set forth in the *Harivaṃśa* in verses 4528-4538 and 4642-4658. This *samāja* was called by Kāṃsa in order that his people might witness a wrestling match between Kṛishṇa and Balarāma on the one hand and Chāṇūra and Mṃshṭika on the other. Here the word *samāja* is used synonymously with *raṅga* and *prekshāgṛa*, and appears to be a building erected by Kāṃsa for permanent use for entertaining his subjects by the exhibition of public spectacles. The building was at least two-storeyed and divided into a number of compartments with passages running inside. They all faced the east, and were provided each with *mañchas*³ which were arranged in raised tiers one behind the other. Some of these compartments were specially reserved for the various guilds (*śreṇī*) and classes (*gaṇa*), which on festive occasions decorated them with banners indicative of their profession. The prostitutes had also their own *mañchas* separately. But ladies of the harem were accommodated in the compartments of the upper storey, some of which were furnished with minute lattice windows (*sūkshma-jāla*) and others with curtains (*javanikā*). The golden *paryāṅkas* and the principal seats were covered with painted cloths (*kuthā*) and flowers. Drinking pitchers were fixed into the ground at due intervals, and fruits, stimulants (*avadāṇā*) and unguents (*kashāya*) were provided for. A not forgettable feature of the *samāja* was the offering of *bali*, which has been twice mentioned in this account.

A second description of *samāja* is contained in the *Mahābhārata*, *Adiparvan*, chap. 184 and ff. When Droṇa made the young Kaurava and Pāṇḍava princes conversant with the science of arms, he informed Dhṛitarāshṭra of it, who thereupon ordered Vidura to have a public exhibition made

¹ Vol. XXI., p. 392 ff.² Smith's *Asoka* (2nd edition), p. 156, note; *Early History of India*, p. 165, note 2; Hultzsch in *Jour. E. As. Soc.* for 1911, p. 785.³ *Mañcha* no doubt corresponds to the Hindi *māṃchā* or Gujarātī *māṃch*, and denotes a kind of stool or chair. *Paryāṅka* was only an elaborate kind of *mañcha*.

of their skill. A *samāja* was accordingly announced to the people. Land, even and free from trees, was selected, and the necessary portion of it measured out, by Droṇa, who also made an offering of *bali*. On the ground so selected the architects of the king raised a *prekṣhāgāra*. The people made their own *mañchas* and the rich folk their own *śibikās*. On the day fixed Dhṛitarāshṭra with the ladies of his royal family attended; and what with musical instruments sounding and what with the excitement of the people, the *samāja* was in an uproar like the ocean. There after Droṇa entered the *raṅga*, again offered a *bali*, and caused Brāhmaṇas to pronounce benedictions. Then the whole array of the young princes made their appearance and commenced each showing to the best advantage his proficiency in the military science.

The third description of the *samāja* occurs in the same epic but in chapter 185 and in connection with the *svayamvara* of Draupadī. On an even piece of ground, we are told, and to the north-east of Drupada's capital a *samāja* was erected, adorned with walls, moats, doors and arched gateways and covered with a variegated canopy. It abounded with actors (*nāṭas*), dancers (*nartakas*), and hundreds of musical instruments (*turyas*) and was made fragrant by the burning of *aguru* sticks and the sprinkling of sandal water. The *mañchas* were occupied by princes come from the different quarters and by people of the capital town and the districts. For sixteen consecutive days the *samāja* was held, and it was concluded on the sixteenth day with the appearance of Draupadī and the hitting of the target by Arjuna.

It will be seen from the above summaries, brief as they are, that the words *samāja*, *raṅga*, and *prekṣhāgāra* have been used synonymously and that *samāja* sometimes refers even to the concourse of the people assembled there. All the three *samājas* were held by kings, the first to witness a wrestling match, the second the military manoeuvres of the princes, and the third the *svayamvara* of a princess. No pains were spared to make the people comfortable and make their amusements complete. *Mañchas* and *paryankas* were set up, and different classes of people had different compartments assigned. Arrangements for drinking water and stimulants were made. Actors, dancers, and musical instruments were also brought in to feast their eyes and ears. The *samājas* were sometimes permanent structures as in the case of Kaiśa's *samāja*, and sometimes put up temporarily.

The Brahmanical literature thus tells us that there were two kinds of *samājas*, one in which amusements for the people were organised and the other in which meat and other food were distributed among them. The same thing we find in Buddhist literature also. In *Vinaya* II. 5.2.6 we are informed that certain Bhikshus attended a *samāja* that was held on a hill at Rājagṛīha and that they were censured by the people because they like ordinary sensual laymen took delight in dancing, vocal and instrumental music that were going on there. Here not the slightest mention has been made of victuals. But *Vinaya* IV. 37.1 has a different account to give. Here also a *samāja* on a hill near Rājagṛīha is spoken of, and certain Bhikshus again mentioned to have gone there. But there was nothing at this place to gratify the eye or the ear. The Bhikshus are represented in this *samāja* to have bathed, smeared themselves with unguents and dined, and also to have taken some victuals for their brethren. The words used here for dining and victuals are *bhojanīya* and *kṣādanīya*, which last word the commentator, it is worthy of note, has explained by the term *maṃsāni*.

We thus find that both the Brahmanical and Buddhist literatures allude to two classes of *samāja*. In one the people were entertained with dancing, music, and other performances, and in the other with food of which meat formed the most important part. Now, turning to Rock Edict I. let us see what Aśoka's attitude towards *samāja* was. There were some *samājas* which he condemned outright and in which he saw nothing but evil. On the other hand, there were some which were approved by him. As this edict is devoted to the preservation of animal life, there can

be no doubt, that, the *samājas*, which the Buddhist emperor tabooed, were those, in which animals were slain to serve meat. And further as there was nothing in the other *samājas* for Piyadasi to object to, these must have been the *samājas* which were called *sādhumatā* by him. But why should they have been considered excellent by him? If they were unobjectionable, he should have bestowed neither praise nor condemnation on them. But why were they designated *sādhumatā*? It is not difficult, I think, at least to frame a reply which is plausible. The *samājas* of the second kind were intended as we have seen for the exhibition of public spectacles. Could Aśoka have given a somewhat different turn to these spectacles and utilised the institution of *samāja* for impressing his people with something that was uppermost in his mind? If my interpretation⁴ of Rock Edict IV. is correct, in all likelihood Piyadasi must have shown to his subjects in these *samājas* representations of *vimānas*, *hastins* and *agniskandhas*, by means of which he claims to have increased their righteousness. He informs us that the sound of his drum became a sound of righteousness. What is probably meant is that the drum was beaten to announce a *samāja* in which these spectacles were exhibited. After publishing my interpretation of Rock Edict IV, I was revolving in my mind the question where Aśoka could have shown these representations to his people. The idea suddenly struck me that as *samājas* were *prekshadāras* which were thronged by all sorts and conditions of men, he could not have done better than used these places for exhibiting these *vimānas*, *hastins*, and so forth. This is the reason, I believe, why *samājas* of the second class were looked upon favourably by him. That it was the practice of the kings of ancient India to call *samājas* is clear from the descriptions given above and also from epigraphic references cited in my last article. These last speak of Khāravela, king of Kalinga, and Gautami-putra Sātakarṇi as having amused their subjects with *utsavas* and *samājas*.

I now proceed to consider the third or last part of Rock Edict I. in which Piyadasi speaks of hundreds of thousands of animals slain every day in his royal kitchen. In my last article on this inscription, I interpreted this passage to mean that these animals were slaughtered to serve meat on the occasion of these *samājas* which he now condemned but which he formerly celebrated. But this interpretation is open at least to two objections. First, the word *anudīpasāṇa* is rendered devoid of all meaning. For the natural and usual sense of this term is "every day", and it is not possible to suppose that before the spirit of righteousness dawned upon the mind of Piyadasi, he was in the habit of holding a *samāja* every day. Such a thing is an utter impossibility. Secondly, the slaughter of the animals referred to by him took place, as we are distinctly told, in his own kitchen (*mahānasa*) and not in a *samāja*. Nor is it possible to suppose that these *samājas* were celebrated near the royal palace, and, in particular, in the close proximity of the royal kitchen. For all evidence points to such *samājas* coming off not only far from the palace but also far from the city. Both the *samājas* described in the *Mahābhārata* and alluded to above were held outside the capital towns. And the references from Buddhist literature cited above inform us that they were held on the tops of hills. Hence *samājas* can possibly have nothing to do with the fearful killing of animals, that, as Aśoka tells us, was carried out every day in his kitchen. The questions therefore naturally arise: why did this daily slaughter take place? Was such a thing ever done by any other king? Those who have read chapter 208 of the *Vanaparvan* of the *Mahābhārata* can have no difficulty in answering these questions. In this chapter we are told that two thousand cattle and two thousand kine were slain every day in the kitchen (*mahānasa*) of the king Rantideva and by doling out meat to his people he attained to incomparable fame. This statement, I have no doubt, at once unravels the mystery which has hung over the passage of the edict. We cannot help supposing that like Rantideva Aśoka also was in the habit of distributing meat among his subjects and that his object in doing so must have been precisely the same,

⁴ *Indic*, p. 252f.

viz., that of making himself popular. This explanation fits here so excellently that, in the absence of a better one, it may, I think, be safely accepted. But he put a stop to this terrible animal carnage the moment his conscience was aroused and at first restricted it to the killing of three animals everyday which were required strictly for the royal table, and finally abolished this practice also, as we can well believe from the concluding words of the edict.

XX.—Ujjain Stone inscription of Chaulukya Jayasimha.

When I was at Ujjain in January last, I was told by the people that a fragment of an inscription recently discovered was lying in the compound of the local Municipality. On personally inspecting it, I found that though the inscription was but a fragment, the preserved portion of it was of great importance for the history of the Chaulukya and Paramāra families. It begins with the date, *viz.*, Thursday the 14th of the dark half of Jyeshṭha of Vikrama Samvat 1195, and refers itself to the reign of the Chaulukya sovereign, Jayasimhadēva. His usual epithets also are given, *viz.*, *Tribhuvana-gaṇḍa*, *Siddha-chakravartī*, *Avantīndha* and *Vaṇaraka-jishṇu*, and he is mentioned to be reigning at Anahilapāṭaka (Anhilvādā). Mahattoma Sri-Dādāka was at that time the keeper of the seal at Anahilapāṭaka. Then, in lines 7-8, whose meaning is clear but whose grammatical construction is not faultless, we are told that Jayasimha was per force holding the district (*maṇḍala*) of Avantī after vanquishing Yaśovarman, king of Mālwa. The next two lines inform us that Mālwa was held for Jayasimha by Mahādeva, who was a son of Dādāka¹ Dādāka and who belonged to the Nāgara race. Then follow names of some individuals and the mention of the god Kirtinārāyaṇa. But as the stone is broken off from here, their connection is far from clear.

The importance of the inscription is centred in the mention of the district of Avantī being held by the Chaulukya Jayasimha after defeating the Paramāra Yaśovarman. This gives confirmation to the fact that the old Gujarāt chronicles speak of Jayasimha as seizing and imprisoning Yaśovarman and bringing all Avantideśa together with Dhār under his subjection.² That Yaśovarman was thrown into prison is borne out by a Dohad inscription,³ which represents Jayasimha to have imprisoned king of Mālwa who can be no other than this Paramāra prince. We have a copper-plate grant found at Ujjain, which gives V.E. 1191 as the date of Yaśovarman and couples with his name the titles *Mahārājādhirāja Paramēśvara*. Jayasimha must, therefore, have inflicted this crushing defeat on Yaśovarman between V.E. 1191 and 1195. We are told that Yaśovarman contrived to escape from his prison, and, with the assistance of the Chohān king of Ajmer, regained his possessions and came to terms with Jayasimha.

THE PRIORITY OF BHĀMAHA TO DANDIN.

BY RAO BAHADUR K. P. TRIVEDI, B.A.; AHMEDABAD.

THE question of the priority of Bhāmaha to Daṇḍin has been discussed fully by me in the Preface to my edition of the *Pratīparudrayaśobhāśaṅga* in the Bombay Sanskrit Series. I have also given there my views in regard to the reference to Nyāsakāra which is found in Bhāmaha's work. Since, however, Prof. K. B. Pāṭhak has chosen to establish his theory of the priority of Daṇḍin to Bhāmaha on the strength of the reference which he thinks is indisputably a reference to Jinendrabuddhi of the eighth century, disregarding, or not attaching much value to, or not caring to refute other grounds which lend a strong presumption in favour of the priority of Bhāmaha to Daṇḍin, I shall try in this article first to show that the Nyāsakāra alluded to by Bhāmaha is not Jinendrabuddhi, and then to mention some grounds which lend a very strong colour to the belief in my mind of the priority of Bhāmaha to Daṇḍin.

¹ See e. g. the *Dvayāraya-kāya* (*Ante*, Vol. IV., p. 236).

² *Ante*, Vol. X., p. 129.

The verses in Bhāmaha's *Kāvyadīpanī* in which Nyāsakāra is alluded to are as under :—

शिष्टप्रयोगमात्रेण न्यासकारमतेन वा ।

तृचा समस्तपङ्क्तिर्न कथंचिदुदाहरेत् ॥

सूचज्ञापकमात्रेण वृद्धहस्ता यथोदितः ।

अकेन च न कुर्यात् कृत्ति तद्गमको यथा ॥

The passage from Jinendrabuddhi's *Kāśikāśivaraṇapāñjikā*, as quoted by Prof. Pāṭhak, is as under :—

अयं किमर्थं तृचः सातुबन्धस्थोच्चारणम् । तृचो निवृत्त्यर्थम् । नैतदस्ति । तद्योगे न लोकाव्ययेत्यादिना पङ्क्ति-
प्रतिषेधान् । एवं तद्वैतदेव ज्ञापकं भवति तद्योगेऽपि कश्चित् पङ्क्ति भवतीति । तेन भीष्मः कुरुणां भयशोकहन्ता-
त्येवमादि सिद्धं भवति ॥

Now what Bhāmaha urges is that Pāṇini's *sūtra* 'तृचकाभ्यां कर्तरि' २।२।१५|| should be strictly observed and no पङ्क्तिस्तुल्य compound formed with words ending in the subjective तृच् and भक suffixes. Consequently no compound takes place in instances like अयो सटा, वज्रस्य भर्ता, and ओदनस्य पाचकः. How then, says Bhaṭṭoji Dikshita, is a compound like चिमुवनविधातुः in पदानां निर्माश्लिमुवनविधातुश्च कलहः to be accounted for? He then gives Kaiyaṭa's view 'शेषपङ्क्ताः समास इति कैयटः'. It will thus be seen that a compound of कारकपङ्क्ति with a word ending in तृच् or भक in the subjective sense is forbidden and that whenever a compound of a word in the genitive case is formed with a word ending in subjective तृच् or भक as in चिमुवनविधातुः it should be taken as a compound of शेषपङ्क्ति with a तृजन्त or भगन्त word.

Let us now see what the extract given above from the *Kāśikāśivaraṇapāñjikā* means. Nyāsakāra discusses the propriety of the *anubandha* च् in तृच् in the *sūtra* 'तृचकाभ्यां कर्तरि.' His extract, as I understand it, means as under :—'Why does Pāṇini pronounce तृच् with its *anubandha* च्? In other words, why does Pāṇini not give the *sūtra* as 'चकाभ्यां कर्तरि'? What is the propriety of the *anubandha* च्? Nyāsakāra says that तृच् is pronounced to exclude तृच्. That is to say, a compound of पङ्क्ति with a तृजन्त is forbidden, not with a तृजन्त. But this view brings in another difficulty; for the use of the genitive is forbidden with a तृजन्त word by 'न लोकाव्यय-
निष्ठाखल्यर्थतृचम्' २।३।६९|| and so पङ्क्तिसमास with a तृजन्त is out of the question. This difficulty is obviated by Nyāsakāra by supposing that this very *sūtra* is a ज्ञापक that the genitive may sometimes be used with a तृजन्त word and that the निषेध or prohibition of the genitive with a तृजन्त word by the *sūtra* 'न लोका-' is अनित्य or inconstant. The prohibition of the genitive with a तृजन्त word being inconstant, the *prayoga* भीष्मः कुरुणां भयशोकहन्ता etc. according to the extract as given by Prof. Pāṭhak or the compounds भयशोकहन्ता etc., can be justified.

In brief, the gist of the Nyāsakāra's contention is this. No compound of the genitive with a तृजन्त word can take place according to Pāṇini's तृचकाभ्यां कर्तरि. Therefore compounds of the genitive with a word ending in तृच् should be justified by taking the word ending in तृच् to be तृजन्त.

Now let us see what Bhāmaha means and whether the Nyāsakāra alluded to by him is Jinendrabuddhi. He urges very strongly that Pāṇini must be strictly followed and that compounds of the genitive with a word ending in तृच् should on no account be formed either on the strength of शिष्टप्रयोग, i. e., the use of such compounds by the learned, or on the strength of the view of the Nyāsakāra, as the compound वृद्धहस्ता has actually been mentioned simply on the strength of सूचज्ञापक. कथंचित् seems to have been explained by Bhāmaha by सूचज्ञापकमात्रेण. Some justify compounds of the genitive with a word ending in तृच् by Pāṇini's own निर्देश in the *sūtra* जनिकर्तुः प्रकृतिः. The sense of Bhāmaha's words is quite clear. He contends that Pāṇini must be followed and no compound of the genitive with a तृजन्त word should ever be formed; Nyāsakāra's opinion should on no account be accepted and पङ्क्तिसमास

with a *तृजन्त* should not be formed. Thus the view of Bhāmaha's Nyāsakāra is that षष्ठीसमास with a *तृजन्त* word may take place. This is distinctly against Pāṇini and is therefore very strongly condemned by Bhāmaha. *तृचा समस्तषष्ठीकं न्यासकारमतेन न कथयितुं शक्यते* means distinctly that according to the view of the Nyāsakāra षष्ठीसमास with a *तृजन्त* may be allowed. *तृचा षष्ठीसमासो भवतीति न्यासकारमते सन्तेन तृचा समस्तषष्ठीकं न कथयितुं शक्यते* यतोऽपाणिनीयमेतत्—

This is the purport of Bhāmaha's words. Bhāmaha had great reverence for Pāṇini; for at the end of the sixth *parichchheda* he says, 'अद्वैतं जगति नतं हि पाणिनीयम्'

Now let us see whether Jinendrabuddhi is the Nyāsakāra alluded to by Bhāmaha. That the two Nyāsakāras, the one alluded to by Bhāmaha, and the commentator on the *Kāśikādrīti*, are far from being one and the same person must have now been clear on the following ground :—

The Nyāsakāra, Jinendrabuddhi, is not in favour of a षष्ठीसमास with a *तृजन्त* word; but justifies a compound of the genitive with a word ending in *तृ* by taking the word ending in *तृ* to be *तृन्* and not *तृच्*. Thus Bhāmaha's Nyāsakāra can never be Jinendrabuddhi.

Moreover, *वृचहन्ता यथोदितः* means that the compound *वृचहन्ता* is उदित—actually mentioned by Nyāsakāra. It cannot mean सूचित; so that it can be included in the class *मयशोकहन्ता* owing to the use of the word आदि as Prof. Pāṭhak seems to think. Bhāmaha's Nyāsakāra must be one who has actually used the compound *वृचहन्ता*. It is thus as clear as anything that the Nyāsakāra of Bhāmaha is not Jinendrabuddhi on the two following grounds :—

(1) Bhāmaha's Nyāsakāra is distinctly in favour of the compound of the genitive with a word ending in *तृच्*; while Jinendrabuddhi is not in favour of such a compound and justifies a compound of the genitive with a word ending in *तृ* by taking the word ending in *तृ* to be a word ending in *तृन्* and not *तृच्* to avoid the violation of the *Sātra* 'तृजकाभ्यां कर्तरि'.

(2) Bhāmaha's Nyāsakāra has mentioned the compound *वृचहन्ता* on the strength of *वृचज्ञापक* and this compounded word must be understood to be *तृचा समस्तषष्ठीक*; that is, *वृचहन्ता* is a compound of the genitive with a *तृजन्त* and not *तृजन्त* word. Jinendrabuddhi does not mention the compound *वृचहन्ता* at all; and the compound that he mentions according to Prof. Pāṭhak's extract is *मयशोकहन्ता*. He uses आदि and thus *वृचहन्ता* may be proved to be correct (सिद्ध) according to him. But it is not उदित or actually mentioned by him; nor is it according to Jinendrabuddhi a compound of the genitive with a *तृजन्त* as Bhāmaha's Nyāsakāra evidently sanctions.

Prof. Pāṭhak says, "I shall give below Bhāmaha's verses, together with the passage containing the Nyāsakāra's *Jāṭpaka*, as the extract supplied to Mr. Trivedi from Mysore is most corrupt." Now Bhāmaha's verses given by Prof. Pāṭhak are the same as in my edition of the *Pratāparudriya* and there is no difference in reading whatsoever; and the extract supplied to me does not differ from Prof. Pāṭhak's extract except in one place, where the reading in my passage is more to the point than the one in Prof. Pāṭhak's extract. My extract is as under :—

अथ किमर्थं सातुबन्धस्योच्चारणं तृजिति । तृनो निवृत्त्यर्थम् । नैतदस्ति । तद्योगे न लोकाव्ययनिष्ठेत्यादिना षष्ठीप्रतिषेधात् । एवं तर्हि तदेव ज्ञापकं भविष्यति तद्योगे क्वचित् षष्ठी भवतीति । तेन भीष्मः कुमाराणां मयशोकस्य हन्ता इत्येवमादि सिद्धं भवति ।

On comparing this extract supplied to me for my edition of the *Pratāparudriya* with Prof. Pāṭhak's extract as given above, it will be seen that there is no material difference in them except at the end in the instance given. Now *मयशोकस्य हन्ता* is more to the point than *मयशोकहन्ता*; for Jinendrabuddhi has given this instance to justify the use of the genitive with a *तृजन्त* word and to show that the prohibition 'न लोकाव्यय—' is अनित्य. The justification of a compound is not in dispute and therefore the reading given in Prof. Pāṭhak's extract is not quite in point; though it appears to be the correct reading as a line of a verse from the *Mahābhārata*.

Prof. Pāṭhak says, 'When Mr. Trivedi says that "many Nyāsakāras are mentioned in the *Dhātuvṛtti* of Mādhavāchārya: जेनेन्द्रन्यास, न्यासोद्योत, बोधिन्यास, शाकटायनन्यास," he tells us something less than the truth.' Prof. Pāṭhak then quotes three or four passages where *Nyāsa* or *Nyāsakāra* is mentioned. The truth is that *Nyāsa*, *Nyāsakāra*, *Haradatta*, *Padamañjari*, *Maitreya*, etc., are mentioned or quoted so very frequently in the *Dhātuvṛtti* that it is useless to quote passages to show it to the reader. Moreover, the point at issue is whether there was *only one* *Nyāsakāra* or whether there were *more than one* *Nyāsakāra*. To establish that there were more than one *Nyāsakāra*, I have given the different *Nyāsakāras*, mentioned by Mādhava, and I now quote a few passages where they are mentioned:—

(a) स्पष्टं चैवं 'गुणधूप' इत्यत्र न्यासपदमस्त्वर्थावपि । अत्र जेनेन्द्रन्यासे पणतेः सार्वधातुकेऽप्यावधिकल्प उक्तः p. 266 Vol. I. Part I. (Mysore edition).

Here जेनेन्द्रन्यास is distinctly mentioned as different from न्यास.

(b) कथं तर्हि प्रत्युदाहरणं 'पानप्ये खिद्ये' 'खलप्ये खिद्ये' इति । उच्यते—क्रियाशब्दत्वेऽप्यनयोः पुंसि मुख्या वृत्तिः पुंसांमेव कृत्विगमुचितं यदुत प्रामन्यनं नाम । एवं खलपवनमपि । आभ्यानं तु क्रीपुंससाधारणमिति विशेष इति । न्यासोद्योतादावप्येवमुक्तम् । p. 74 Vol. I. Part I.

परिमहे तु अगतित्वात् अन्तर्हत्वा मूषिका इयेनो गत इति भवति । परिगृह्येत्यर्थः । अत्र न्यासोद्योते— 'अन्तःशब्दो धातोः परिमहे वृत्तिः कर्गोति' इति । p. 14 Vol. II. Part I.

मनोहृत्य पयः पिबति.....उक्तं च न्यासोद्योते 'हन्तिरधीकरणाङ्गे निवृत्तौ वर्तते अभिलाषनिवृत्तिमवधीकृत्य पयः पिबतीत्यर्थे इति । p. 14 Vol. II. Part I.

'अकथितं च' इत्यत्र न्यासे निवहिरिजिजिण्डीन् प्रस्तुत्य प्रामादीनामप्यजादिवत् क्रियाजन्यकलभाक्त्वेऽपि तदविवक्षायामकथितत्वनुक्तम् । यदाह—अकथितेष्वेषां घट्टणं यदा प्रामादीनामीप्सिततमस्वमनीप्सिततमत्वं च न विवक्ष्यते किं तु कर्तुरीप्सितत्वमात्रमेव तदर्थमिति । न्यासोद्योते च—अप्रादीनां प्रामादीनां चोप्सिततमत्वनपि सिद्धमित्युक्तम् । p. 529 Vol. I. Part II.

It is not quite clear whether the न्यासोद्योत or the उद्योत on the न्यास quoted here is on the same न्यास that is quoted before or on another न्यास.

सातयतांति सातयः ।.....'सातिः सौवो धातुः' इति वृत्तौ । बोधिन्यासेऽपि 'सातिः सुखे वर्तते सौवः' इति । जिनेन्द्रहरदत्तौ 'सातिर्हेतुमण्यन्तः' इति । p. 122 Vol. I. Part I.

Here बोधिन्यास is made distinct from the well known न्यास of जिनेन्द्र.

पिबननम् । सद्यश्च भोजनम् । तथा च वृत्तौ—अभ्यवहारक्रियाविशेषोऽभिधीयते यत्र स्वनमस्ति । सद्यश्च भुङ्क्ते इत्यर्थे इति ।

पिनाकी तु । भुञ्जानः कितिष्ठच्छब्दं करोतीति । काश्यपस्तु भोजनमेवार्थमाह । बोधिन्यासेऽपि पक्षयय-वापि शंसितम् । pp. 457-58 Vol. I. Part II.

अत्र स्वान्वाद्यः केचिदेतदन्ता पठादय इति । बोधिन्यासे तु भवन्त्यन्ता इति । p. 459 Vol. I. Part II.

सर्वे नादयो नोपदेशा इत्यस्य पञ्चशब्दे 'नृतिनन्विनर्दिनङ्गिनादिनाधृताधृतवर्जम्' इत्यत्र चैनं न पठतुः (नेवे-वाभरणकारी) । अत्र काश्यपः—'नाधतेर्णोपदेशस्वमङ्कं गणकारकृत्तिकासादीनामनिहत्यात्' इति । वृत्तीनन्वीत्या-विषाक्ये नृवर्जं नृत्यादीन् पठित्वैतान् सप्त वर्जयित्वा इति वदन् श्रीकाशेऽप्यवैवानुक्तः । तथा पञ्चशब्दवाक्ये नर्दति-वर्जं सर्वानितान् पठतः शाकटायनन्यासकृतोऽप्ययमेव पक्षोऽभिमतः । p. 94 Vol. I. Part I.

The above quotations make it clear that Mādhava mentions more than one *Nyāsakāra*.

Having shown that the *Nyāsakāra* of Bhāmaha is not Jinendrabuddhi, I shall proceed to place before the reader arguments in favour of Bhāmaha's priority to Dandin.

(a) Old writers on *Alankāras* are mentioned as ग्रामहृदयः in the following:—

(1) पूर्वोचो भामहादिभ्यः साकं विहिताञ्जलिः ।

वक्ष्ये सम्भवतः कारणात् सर्वस्वसंग्रहम् ॥

(2) भामहो हृदयभूतवधिरतनालंकारकारः ।

अलंकारसर्वस्व p. 3

(3) भामहादिभिरननु अर्थान्तरन्यास एव

द्वयट's काव्यानुशासन p. 116

The views of Daṇḍin being the same as those of Bhāmaha about अर्थान्तरन्यास, Rudraṭa would have said दण्ड्यादिभिरननु, had he thought Daṇḍin to be the oldest *Alaṅkārikas* in place of Bhāmaha.

(4) Bhāmaha's work is looked upon with great reverence by authors like Mammaṭa and Abhinavagupta and is called आकर. The following verses have been quoted by Mammaṭa :—

सेषा सर्वत्र वक्रोक्तिरनर्थार्थो विभाव्यते ।

यत्नोऽस्यां कविना कार्यः कोऽलंकारोऽनया विना ॥

काव्यप्र० X.

This verse is quoted in अन्वयालोक and लोचन pp. 207-8 and हेमचन्द्र's काव्यानुशासन p. 267.

रूपकादिरलंकारस्त्वर्थान्वयैर्बहुधा विहितः ।

न कान्तमपि निर्भूयं विभाति वनितामुखम् ॥

रूपकादिमलंकारं बाह्यमाचक्षते परे ।

सुपां तिङां च व्युत्पत्तिं वाचां वाऽलङ्कृत्यलङ्कृतिम् ।

सदेतदाहः सौशब्ध्यं नार्थव्युत्पत्तिरीदृशी ।

शब्दाभिधेयलंकारभेदादिदं इयं तु नः ॥

काव्यप्र० VI.

Rāghavabhaṭṭa in his *Arthadyotanikā* on the *Alhijūḍnāśāḥkuntala* calls Bhāmaha's work आकर—अत एव सर्वलंकाराणामविशयोक्तिगर्भस्वमाकरे दक्षितम्—“नलंकारोऽनया विना” इति ।

The mention of authors like Rāmaśarmaṇ and Sākhāvardhana and works like *Achyutottara*, *Ratnādharaṭa*, *Rājamitra*, and *Aimakaravāṇī*, and the fact that nothing is known about these authors and works and that they are not found quoted anywhere else lead a strong colour to the presumption that Bhāmaha belongs to very ancient times and this justifies the mention of Bhāmaha at the top of old *Alaṅkārikas* in expressions like पूर्वोक्तो भामहादिभ्यः, भामहो हृदयभूतवधिरतनालंकारकारः, the great reverence in which he was held by authors like Mammaṭa and Abhinavagupta, and the application of the epithet आकर to his work.

(c) Daṇḍin's numerous divisions of *Upamā*, *Rūpaka*, *Ākūṣepa*, and *Vyatireka* and his detailed treatment of *Śabdātalaṅkāras* in a separate chapter strengthen the presumption of the priority of Bhāmaha to Daṇḍin and of Daṇḍin's belonging to a later age than Bhāmaha ; since the latter's divisions of *Alaṅkāras* are not so minute and since he does not attach much importance to *Śabdātalaṅkāras*.

(d) A close comparison of several portions of the works of Bhāmaha and Daṇḍin almost affords a convincing evidence in favour of the priority of Bhāmaha to Daṇḍin. The following may be mentioned as instances :—

(1) Verses about कथा and आख्यायिका—

प्रकृतानाङ्गुलभ्रम्यशब्दार्थपदवृत्तिना ।

गद्येन शुक्तोक्तानार्थां सोऽङ्गुलसाव्यायिका मता ॥

शृङ्गलाख्यायते तस्यां नायकेन स्वचेष्टितम् ।

वक्त्रं चापरवक्त्रं च काले भाव्यपर्यवसि च ॥

कवेरिनिर्मायकृतैः कथनैः कैश्चिदङ्गिता ।

कन्वाहरणसंघानविप्रलम्बोदयान्विता ॥

न वक्त्रापरवक्त्राभ्यां शुक्ता नोऽङ्गुलसवस्वपि ।

संस्कृतं संस्कृता चेष्टा कथापञ्चशनाक् तथा ॥

अन्यैः स्वचरितं तस्यां नायकेन तु नोच्यते ।
स्वगुणविष्कृतिं कुर्वाद्भिजातः कथं जनः ॥ भामह.
Compare with the above, the following from Daṇḍin's *Kāvyādarśa* :—

अपादः पदसन्तानौ गद्यमाख्यायिका कथा ।
इति तस्य प्रमेयौ द्वौ तयोराख्यायिका किल ॥
नायकेनैव वाच्यान्वा नायकेनेतरेण वा ।
स्वगुणविष्कृतिं सोपो नात्र भूतार्थघासिनः ॥
अपि स्वनिघनी वृद्धस्तथाप्यन्वैरुहीरपात् ।
अन्यो वक्ता स्वयं वेति कीदृशो भेदकारणम् ॥
वक्त्रं चापरवक्त्रं च सोच्छ्रासत्वं च भेदकम् ।
विद्वन्माख्यायिकायाश्चेत् प्रसङ्गेन कथास्वपि ॥
आर्थादिवत् प्रवेशः किं न वक्त्रापरवक्त्रयोः ।
भेदश्च वृद्धो लम्भाविच्छ्रासो वास्तु किं ततः ॥
तत् कथाख्यायिकेत्येका जातिः संज्ञाद्वयाकृता ।
अवैशान्तर्नविष्यन्ति शेषाश्चाख्यानजातयः ॥

On a comparison of the description of कथा and आख्यायिका as given by Bhāmaha and Daṇḍin, it will be seen at once that Bhāmaha recognizes a difference between them; while Daṇḍin says that they belong to one and the same class of compositions with two names. The facts that Daṇḍin knew that the difference between कथा and आख्यायिका was traditional (as the word किल- 'किल इति हेतिहो'—shows) and accepted by old *Ālankārikas*, that Bhāmaha acknowledges the difference between them and that the points of difference between them (1 आख्यायिका सोच्छ्रास कथा नोच्छ्रासवती; 2 आख्यायिकायां वक्त्रं चापरवक्त्रं च कथायां न वक्त्रं नाप्यपरवक्त्रम्; 3 आख्यायिकायां नायकेन स्वगुणमाख्यायते कथायामन्यैर्नायकवृत्तमाख्यायते) as attacked by Daṇḍin are precisely the same as those mentioned by Bhāmaha afford a strong presumption in favour of the priority of Bhāmaha to Daṇḍin.

2 गतोऽस्तमकौ भातीन्दुर्यान्ति वासाय पक्षिणः ।
इत्येवमादि किंकाष्यं वाताग्नेनां प्रचक्षते ॥
भामह.
गतोऽस्तमकौ भातीन्दुर्यान्ति वासाय पक्षिणः ।
इतीदमपि साध्वेन कालावस्थानिवेदने ॥
दण्डिन्.

Here गतोऽस्तमकः etc. is declared to be bad poetry by Bhāmaha; while Daṇḍin says that it is undoubtedly good poetry. The use of एव is pointed and seems distinctly levelled against those who call it bad poetry. Bhāmaha is one that we have found as such and this allusion of Daṇḍin is another strong evidence in favour of the priority of Bhāmaha.

3. अपार्यं ध्वर्यमेकार्यं ससंघबनपकनम् ।

शब्दहीनं यतिभटं निजवृत्तं विसन्धि च ॥
देशकालकलालोकन्यायागमविरोधि च ।
प्रतिज्ञाहेतुवृष्टान्तहीनं वृष्टं च नेष्यते ॥

भामह.

अपार्यं ध्वर्यमेकार्यं ससंघबनपकनम् ।
शब्दहीनं यतिभटं निजवृत्तं विसन्धिकम् ॥
देशकालकलालोकन्यायागमविरोधि च ।
इति शेषा इत्येते वज्र्याः काव्येषु सूरिभिः ॥
प्रतिज्ञाहेतुवृष्टान्तहीनार्थो न वेत्स्यती ॥
विचारः कर्कशप्रायस्तेनालीढेन किं कलम् ॥

दण्डिन्.

It will be seen that the first ten *doshas* mentioned by Daṇḍin are precisely the same as those given by Bhāmaha and that the eleventh *dosha* of Bhāmaha is criticised by Daṇḍin. This is almost conclusive evidence in favour of the priority of Bhāmaha to Daṇḍin.

4. The verse

अथ वा मम गोविन्द जाता स्वयि गृहामते ।
कालेनेवा भवेत् प्रीतिस्तत्रैवागमनात् पुनः ॥

is given as an instance of प्रयोऽलंकार both by Bhāmaha (III.5) and Daṇḍin (II.276). It is very probable that Daṇḍin has borrowed this verse from Bhāmaha; for when the former does not acknowledge the source from which he borrows as in लिम्पतीव तनोऽङ्गानि &c., the latter acknowledges the sources wherever he borrows verses from others as *Rājamitra*, *Achyutottara*, etc. Moreover, Bhāmaha says distinctly that the instances to illustrate figures of speech are his own composition (स्वयंकृतैरेव निवर्तनैरियं मया प्रकृष्य खलु वागलंकाराः । II. 96). This is an additional evidence for the presumption of the priority of Bhāmaha to Daṇḍin.

5

काव्यान्वयि यदीनानि व्याख्यागम्यानि शास्त्रवत् ।
उत्सवः सुधियानेव हन्त कुर्मधसो हताः ॥

मातृ II. 20.

व्याख्यागम्यानिर्दं काव्यमुत्सवः सुधियामलम् ।
हता कुर्मधसश्चास्तिन् विद्वत्प्रियतया मया ॥

मातृ XXII. 34.

Here it is evident that one has borrowed from the other. The verse is ascribed to Bhāmaha by Srivatsāṅkamiśra of the tenth century A.D. This places Bhāmaha before Bhaṭṭi of the 6th or the 7th century.

Prof. Pāṭhak quotes from my text the verses यवुक्तं विप्रकारस्य तस्याः कैश्चिन्महात्मभिः etc. and states that Bhāmaha is attacking Daṇḍin in whose work the three divisions of *Upamā* mentioned by Bhāmaha are found. This inference or presumption does not seem to me to be at all warranted by facts; for Daṇḍin does not divide *Upamā* into three kinds only, but into a number of varieties (धर्मोपमा, वस्तुपमा, विपर्ययोपमा, अन्योन्योपमा, निरूपोपमा, अनियमोपमा, समुच्चयोपमा, अतिशयोपमा, उत्प्रेक्षितोपमा, अद्भुतोपमा, मोहोपमा, संशयोपमा, निर्णयोपमा, श्लेषोपमा, समानोपमा, निन्दोपमा, प्रशंसोपमा, आपिख्यासोपमा, विरोधोपमा, प्रतिषेधोपमा, चद्रूपमा, तत्त्वाख्यानोपमा, असाधारणोपमा, अमृतोपमा, असंभावितोपमा, बहुपमा, विक्रियोपमा, मालोपमा, वाक्यार्थोपमा, प्रतिवस्तूपमा, तुल्ययोपमा, and हेतूपमा) so many as 32 in number; nor does Daṇḍin's *विस्तर* or long division of *Upamā* begin with मालोपमा so that Bhāmaha's words 'मालोपमादिः सर्वोऽपि न ज्ञायान् विस्तरो मुधा' may be taken as levelled against Daṇḍin. If Bhāmaha had Daṇḍin in view, he would have said धर्मोपमादिः instead of मालोपमादिः.

(c) Tarunavāchaspati, a commentator on the *Kāvyādarśa*, distinctly mentions in three or four places the priority of Bhāmaha to Daṇḍin:—

(a) भामहो न 'कस्याहरणसंश्रामविप्रलम्भोदयान्विता' इति आख्यायिकाविशेषणतया युक्तम् । आख्यायिकानेह एव अत्र निराकृतः । Com. on I. 29.

(b) हेतुं लक्षयिष्यन् भामहेनोक्तं—'हेतुश्च सूक्ष्मलेशो च नालंकारतया मताः'—इत्येतत् प्रतिक्षिपति—हेतुश्चेति । Com. on II. 235.

(c) हेतोरलंकारस्वप्रत्याख्यायितं भामहं प्रत्याह—प्रीत्युत्पादनेति । Com. on II. 237.

(d) सर्ववैयर्थ्यधारणं न युक्तम् । भामहोक्तानां प्रतिज्ञाहान्यादीनामपि विद्यमानत्वाविति चेसाह । प्रतिज्ञेति । Com. on IV. 4.

In (b) and (c) the commentator states distinctly that Daṇḍin criticises Bhāmaha. He thus places Bhāmaha before Daṇḍin.

I think I have made out a sufficiently strong case for the presumption, almost amounting to certainty for the priority of Bhāmaha to Daṇḍin.

THE DATE OF THE MUDRA-RAKSHASA AND THE IDENTIFICATION OF MALAYAKETU.

BY KASHI-PRASAD JAYASWAL, M. A. (OXON.), BARRISTER-AT-LAW, CALCUTTA.

THE arguments of Telang¹ are conclusive to establish the thesis that the play could not have been written later than the eighth century A. D. Now there is a further piece of internal evidence which has been missed, and which, I think, fixes the date of the play with almost absolute certainty.

The *bharata-vākya* to the play names the reigning monarch: "at present (*adhund*) may long reign king Chandra-gupta²". Who was this the then reigning king Chandragupta alluded to in the *bharata-vākya*? Before the eighth century and during a period when Pāṭaliputra was a living town³ (before 644 A. D.) there had been only three Chandraguptas: Chandragupta the conqueror of Seleucus, and the two Guptas bearing that name.

He could not have been the first. Omitting other reasons, it would be sufficient to point out that the Sakas and the Hūgas are mentioned in the play⁴. I attach more importance to the mention of the latter, who were absolutely unknown in the fourth century B.C.⁵

As the first is excluded, the identification must be limited only to the ambit of the two Guptas, out of whom I would select the latter, Chandragupta (II) the Vikramāditya. Chandragupta I was not a monarch of much importance; his name is not associated in any of the Gupta inscriptions with the suppression of any foreign enemy, or any great deeds to elicit a comparison, as in the *bharata-vākya*, with Vishṇu. Chandragupta II, on the other hand, did suppress the political power of the Sakan *mlechchhas* of Western India⁶. Also I feel inclined to suspect a veiled defence of the scandalous murder of the Saka Satrap⁷ in the story put forward in the *Mudrā-Rākṣasa* of the destruction of the *Mlechchha* Parvataka⁸ by Chandragupta the Maurya through the alleged agency of the *visha-kanḍā* ('poisonous girl').

¹ *Mudrā-Rākṣasa* (Nirṇaya Sāgara Press, 4th edition), Introduction, pp. 13-25.

² मृच्छेकादिक्यमाना भुजयुगमधुना संभिता राजमूर्तेः ।

स श्रीमद्वन्धुमृत्वाधिरमवतु महीं पापिवञ्चन्द्रगुप्तः ।

³ Yuwan Chwang (c. 644 A. D.) found Pāṭaliputra in ruins with a population of some 1000 persons. Besides the fact that most of the scenes are laid at Pāṭaliputra, the patriotic speech of Rākṣasa about Pāṭaliputra indicates that at the time of the composition of the play Pāṭaliputra was the capital:

"अयि, मयि स्थिते कः कुमुदपुरमुपरोक्षति । प्रवीरक प्रवीरक, शिप्रमिदानीम् । प्राकारं परितः शरासनधरैः निभं परिकल्पतां, दूरिषु हिरयैः प्रतिदिपयामेवक्षमैः स्वीयताम्. Act II. verse 13.

⁴ Act V, verse 11.

⁵ I discuss below the Hūgas of the *Mudrā-Rākṣasa*.

⁶ In this connexion the prophecy of the Pūrṇas as to the rise in Sākambhari (Sāmbhar) of a popular leader, the Brāhman Kalki, who is an ordinary man in the *Vāyu-Purāṇa* but is treated as an *aśūra* in later works, is significant. There seems to have been some great popular attempt made at uprooting the Sakas in Mālavā and Western Rājputānā about the early decades of the Gupta days, at which point the earlier Pūrṇas close their chronology. [The *Vāyu*, I think, closed before the reign of Chandragupta II, probably in the early days of Samudragupta. For the dominions of the Guptas described there precedes the conquests of Samudragupta:

अमुगङ्गं प्रदायन्तु साकेतं मगधास्तथा ।

एतान् जनपदान् सर्वान् नीक्षन्ते शुभवंशजाः ॥ *Vāyu-Purāṇa* 37 ch. 277.]

⁷ भरिपुरे च परकलवकामुकं कामिनीविषयुग्धं चन्द्रगुप्तः शकपतिमनाशयत्. "Chandragupta, in the capital of the enemy, disguised as a beautiful woman, killed the lord of the Sakas who wanted wives of others". *Harsha-charita*, VI. The truth seems to have been that while a war was waged by Chandragupta II against the Satrap, probably an agent of Chandragupta took advantage of some scandalous intrigues of the Satrap and killed him.

⁸ The Parvataka of the *Mudrā-Rākṣasa* probably conceals in it the historical Philippos, Alexander's Satrap of the Panjab, who is recorded to have been murdered by Indian troops. Philologically Philippos would be changed into Pirābo, * Pirābas or * Pirābas; and an attempt to restore Pirābo or Pirābas into Sanskrit would produce Parvata or Parvataka.

On the basis of the occurrence of the Hūnas in the play, it might be argued that the play must be dated after the Hun irruptions into India, which are believed to have taken place a generation later than the reign of Chandragupta II⁹. But the Huns had been known to this country before they came in as invaders. The *Lalitavistara* mentions the *Hūna-lipi*. They came to be known through the intercourse between India and Tartary and China, which had been well-established and frequent in the 1st and 2nd century A. D. A series of Hindu missionaries of Buddhism¹⁰ to China had already preceded Dharma-raksha (d. 313 A. D.), the translator of *Lalitavistara*. The *Questions of Milinda*, (ii. pp. 203-4) describes "people from Scythia, Bactria, China and Vilita (Tartary)" coming here. We do not know exactly where the Huns stayed immediately after they were driven away by China in the 1st century A. D. But this much is certain that they must have remained in the neighbourhood of Transoxiana through which the route to China lay. Before their attack on Persia (420 A. D.) they had already occupied Bactria. At Balkh and Bamian they had their head-quarters from which they raided south-west and south-east¹¹. In view of these circumstances there is nothing contradictory in having an author under Chandragupta II mentioning the Huns. The very mention shows that up to that time the Huns had not yet occupied any part of India, for they are associated with the Chinese or China (*China-Hūnāiś*, *Mudrā-Rā.* Act V, verse 11). By Kālidāsa they are described as occupying Kāshmir (the land producing saffron)¹²; their Chinese association was completely forgotten in his days. It is also worthy of note that they do not figure in the first army of invasion which came to help Chandragupta against the Nanda (Act II, p. 124); they only appear in the army of Malayaketu, and there too not prominently, but as mere auxiliaries to Saka monarchs (the northern Sakas = the Kushānas)¹³. They had not yet shown themselves superior to their Scythian neighbours, whom they actually overthrew about 465 A. D.

The conclusion, therefore, to which we are led is that the play knows the Hūnas of a time when they had not yet acquired any territory in India, although an attack from them was considered probable. We may roundly put it down on chronological considerations c. 410. A. D. This also would confirm the view that the reigning Chandragupta of the *Uharata-vākya* must be Chandragupta-Vikramāditya (d. c. 413 A. D.) And the annoyance caused to the country by the *melechchhas* at the time of the composition of the drama would refer, if the composition, as it seems probable, took place after the suppression of the Western Satrap (c. 390 A. D.), to the Kushanas, or possibly to the new element of the Huns, who might have already made some incursions, possibly in league with the Kushānas, during the last years of Chandragupta's reign.

"Malayaketu." All the nations, which help the *melechchha* king Malayaketu, in his invasion of Pāṭaliputra, belong, as the late Mr. Telang has pointed out, 'one and all' 'except the name Malaya' 'to the northern parts, and most to the northern frontier of India,'¹⁴ to be more accurate,

⁹ V. Smith, *Early History of India*, 2nd ed., p. 394.

¹⁰ e. g., Mahābala (c. 197 A. D.), Dharmapāla of Kapilavastu (c. 297 A. D.), Dharmakīla (222 A. D.), Vighna (c. 234 A. D.).

¹¹ Sir C. N. Eliot, *Ency. Brit.*, 11th ed., Vol. IX, p. 686.

It is very probable that the invasion of Balkh by Chandra of the Delhi Iron Pillar inscription (who has been now conclusively identified with Chandravarma (c. 460 A. D.) by M. M. Haraprasad Sastri in the light of his new Mandasir inscription) was in response to an early Hun inroad in territories, which were not subject to Samudragupta.

¹² *Raghuvamśa*, IV, 67-68. The Hunic occupation of Kāshmir comes over a century later, i. e., after Mūrirakula's defeat (c. 330, A. D.) by Balāditya and Yasodharman. This would place Kālidāsa about 540-550 A. D., or some 130 years at least later than the composition of the *Mudrā-Rākhaśa*. (I may mention here that I have come across a Hūn caste at Almora, Himalayas.) [For a different interpretation of these verses of Kālidāsa about Hūnas, see Prof. Pathak's note, *ibid.*, vol. XLI.—D. B. B.]

¹³ गान्धारैर्मध्ययाने दवनपतिभिः संविधेयः प्रयत्नः ।

पञ्चासिहन्तु सीराः शकनरपत्तयः संवृ [नृ ?] वाचीनहूयैः ॥

¹⁴ *Mudrā-Rākhaśa*, Introduction, p. 33.

to the north-western frontier of India. Malayaketu's predecessor, Parvataka, also belonged to the same regions. Not a single southern nation is mentioned in his army. Malayaketu thus obviously has no connection with the Malaya of the south. Further, no Malaya¹⁵ in the north-west is known to any branch of Indian literature. And as *Malaya* is nowhere associated with the name of Malayaketu's alleged father and predecessor the *mlechchha* Parvataka, it does not seem to be connected either with any place-name or with any tribal designation. In view of these considerations *Malayaketu* can not be taken as representing originally a Samskr̥ta name. It appears to be merely a samskr̥tised edition of the original *mlechchha* name of the *mlechchha* invader. I propose to read *Malayaketu* as *Salayaketu*, taking the latter as a Hindu edition of *Seleucus*. There is a deceptive similarity between the letters *ma* and *sa* of the Gupta and later scripts, and the change from an unfamiliar *Salaya*-into the familiar *Malaya*-would have been an easy process in the course of copying manuscripts. Whom else could Indian tradition have intended by the *mlechchha* king 'Malayaketu' invading from the north-western frontier with a huge army of Greek and other (auxiliary) forces against Chandragupta the Maurya than the Greek Seleucus? If by the invasion of Malayaketu the Greek invasion¹⁶ alone could be meant, the proposed reading *Salayaketu* in place of *Malayaketu*, I submit, has a very strong case.

KINSARIYA INSCRIPTION OF DADHICHIKA (DAHIYA) CHACHCHA OF VIKRAMA SAMVAT 1056.

BY PANDIT BANKAENA; JODHPUR.

AN article on the above has been prepared and sent by me for publication in the *Epigraphia Indica*, but a summary of it is given here for the information of those interested in the ancient history of Rajputana.

The inscription belongs to the reign of a prince called Chachcha, a feudatory of Durlabharāja of the imperial Chāhamāna dynasty and whose genealogy is as follows:

Vākpatirāja
|
Sinhārāja
|
Durlabharāja

Chachcha is spoken of as a prince descended from the well-known *ṛishī* Dadhichi. The inscription unfolds the following genealogy of this chief:—

Meghanāda
|
Vairisimha
|
Chachcha

Yajāpushpa

Uddharaja

Chachcha is styled Dadhichika or Dahiyaka, which is now-a-days called Dahiyā. The following remarks translated from the Hindi Marwar Census Report of 1891 would be found interesting:—

"Some people hold that Dahiyās are the one-half race that goes to complete the thirteen and a half races of Rāthor. They once ruled over Parbatsar and Jālor, but now they are scattered

¹⁵ Mahāmahopādhyāya Haraprasād Sāstri has kindly drawn my attention to the fact that the term *Malaya* is itself a Dravidian word meaning 'mountain.' Cf. Caldwell, *Grammar of the Dravidian Languages*, 2nd ed., p. 21.

¹⁶ It is probable that some of the details of the invasion of Seleucus might have been confused with the details of the invasion of Menander, e.g., the march upon the capital Pātaliputra might have been transferred from the latter to the former, although it is not impossible that Seleucus was actually routed into a long march in the interior—a strategic policy largely and very successfully followed later on by the Parthians.

here and there. The old fort of Jālor was constructed by the Dahiyās. They now abound in the districts of Jālor, Bāli, Jaswantpurā, Pāli, Siwānā, Sānchor and Mallāgi. They observe widow marriage, and are not regarded as of equal position with other Rajputs."

A detailed and more reliable account of this clan is contained in *Mûtā Nepasī's Chronicle*, a summary whereof will not here be out of place:—

"The original seat of the Dahiyā Rājput is reported to be a fortress named Thālner situated on the banks of the Godāvarī near modern Nāsi, whence they migrated into Mārwar. In the Ajmer province they held the following places:—(1) the Derāvāra-Parbatsar group of fifty-six villages, (2) Sāvar-Ghaṭiyālī, (3) Harsār and (4) Māhrōḥ also called Villavāṭī. All the four villages lie in the north-eastern part of Mārwar. They also owned villages in south-western part as well, i. e., Jālor and Sānchor.¹ Sānchor is said to have been conquered by Vijayaśī with the aid of an accomplice, Vāghelā Māhirāvapa (sister's son of Vijayarāja), from the Dahiyā Vijayarāja in S. 1142. This event is recorded in a verse quoted below:—

“धरा भूषण धकचाल कीध रहिया रहवहे ।
सबरी सबलां सान प्राण मेवास पवहे ॥
आलण सुत विजयसी पंस आसराव प्रागवह ।
खाम रयाग खचवाट सरण दिजे पंजर सोहड़ ॥
बहवाण राव चौरंग आचल नरां नाह आणभग नर ।
धूमेर सेस आं लग आचल तान राज साचौर घर ॥ १ ॥”

Mûtā Nepasī also gives a list of the Dahiyā princes, who reigned round about Parbatsar and Mārōḥ. He mentions Dadhiche as one of their ancestors and specifies their names as follows:—

No. 27 Rāha Rāpo (who inhabited Rohaḍī). No. 28 Kaḍava Rāpo. No. 29 Kīratasī Rāpo. No. 30 Vairasī Rāpo. No. 31 Chācha Rāpo (who raised a temple on a hill in the village of Sīpahāḍiyā). No. 32 Anavī Udharapa (who ruled over Parbatsar and Mārōḥ).

It is clear that the names Vairasī, Chācha and Udharapa of this list (Nos. 30-32) exactly correspond to Vairisimha, Chachcha, and Uddharapa of our inscription. The list however gives Kīratasī as the name of Vairasī's father, whereas he is called Meghanāda in the inscription. But there is nothing to preclude the supposition that Meghanāda and Kīratasī (Kīrttisimha) were the names of one and the same prince, as instances are not wanting of kings known by more than one name. Chācha Rāpo, as we have just seen, is described in *Mûtā Nepasī's Chronicle* as having built a temple on a hill in the village of Sīpahāḍiyā, which seems to be an old name of Kīpasariyā. Our inscription also tells the same story, viz., that Chachcha caused a temple of Bhavānī to be built. The epithet *anavī*, which is coupled with Udharapa, appears to be a corruption of *anamra*, meaning “unbending.” He was succeeded by Jagadhara Rāvata, who ruled over Parbatsar. He constructed a temple, dug a step-well and a well in village Māṇḍala, 2 miles from Parbatsar. His second son was Vilhapa, who wielded sway over the whole district of Mārōḥ, which is, up to the present day, called Villavāṭī. He used to reside in the village of Depārā situated on a hill and 4 miles from Mārōḥ, where an old fort and a tank still exist. Some Dahiyās are still called Depārā-Dahiyās after this village. Of the succeeding generation, Bīto (No. 34) constructed a tank called

¹ There are several villages which are collectively still called Dahiyāpatti, as districts of Mārōḥ and Parbatsar are called Godāḍī (on account of their being once held by Gaudas) and districts to the north of Jodhpur are called Indāḍī (owing to their being once ruled over by Indā Rājputa). This name Dahiyāpatti is sufficient to testify the fact that Dahiyās held some sort of sway over that part of the country in some time past.

Bihāsar in Parbatsar ; and Hamira (No. 35) was a great warrior. His deeds are beautifully described in the following verses :—

“ महाकाल भगवान् जोधार जैनल्लार,
काल्हरो कथन संसार कहियो ।
दुरत पतसाहरे साल जो दुरदो,
दुवडा तयो उर साल रहियो ॥ १ ॥
निवड भड निडर नरवाह नरपहरो,
सकज भड स्वामरो काम सधीर ।
हिवे पतसाह साल हाडो हवो,
हिवे हाडा तयो साल हमीर ॥ २ ॥
आपस्त कहर असवार आखाड सिध,
काम पहवाड इधकार कीवो ।
दुवडे दूड पतसाह जो सुख विवो,
दुरत दूडा उर साल रीवो ॥ ३ ॥ ”

There is a number of *pāṭalīs* or figures of *śaśīs* in an enclosure adjoining the temple containing this inscription. One of these figures bears an epitaph dated V. S. 1300 and containing the name of Vikrama son of Kirtisimha Dahiyā.

This shows that Dahiyās held this part of the country for nearly 300 years, i. e., up to 1300 V. S. The use of the letter *rā*, which is but an abbreviation of *rājā*, prefixed to the name of Kirtisimha, and the word *rājā* before that of his wife show that Kirtisimha was a ruling prince, and not an *ādā* Rājput. The Dahiyā kings mentioned in our inscription were chieftains, no doubt, feudatory to the Chāhamāna overlords, but also wielding sway over a tract of a country. This fact is again corroborated by the following abstract from an inscription of V. S. 1372 discovered in Maṅglānā in the Mārōṭ district :—

“ श्रीचवंशे महामंडलेश्वरश्रीकदुवराजदेवपुत्र—
श्रीपरमसीहदेवमुत्तमहाराजपुत्रश्रीजयतस्व(सि)ह ”

The inscription refers itself to the reign of Śrī Relāṇa-deva (lord) of Raṇastambhapura or Raṇthambhor, and records some arrangements made in connection with a step-well. In this inscription also, the Dahiyā prince, Jayatasimha, is spoken of as *mahā rājaputra*, and his forefather Kaduvarājadeva as *mahāmāṇḍaleśvara*, showing that originally the Dahiyās were certainly of a higher status than that of *ādā* Rājputa, to which position they have now sunk.

A NOTE ON A FEW LOCALITIES IN THE NASIK DISTRICT MENTIONED IN ANCIENT COPPERPLATE GRANTS.

BY Y. R. GUPTA, B.A. ; NASIK.

1. Vāṇanagarikā.

Vāṇanagarikā occurs in the Pimpri plates, edited by Prof. Pāthak in the *Epigraphia Indica*.¹ On page 85 he says that Līlāgrāma and Vāṇanagarikā are identified by Mr. G. K. Chāṇ-dōrkar with Nilgavhān and Vaṇṭ in the Nāsik District. I do not intend to pass any remarks at present on the identification of Līlāgrāma with Nilgavhān. But the assertion that Vaṇṭ is the modern representative of the ancient Vāṇanagarikā seems to me to be without any foundation.² If

¹ A Rājput is called an *ādā* as distinguished from a *jāgirdār*. An *ādā* Rājput is thus one who owns no *jāgir* and is for that very reason looked upon as of inferior status.

² Volume X, pages 81 to 89.

³ This identification was first proposed by Dr. Fleet when he edited the Vaṇṭ grant (*ibid.*, Vol. XI., p. 157), but he afterwards identified Vāṇanagarikā with Vaṇṭer (*ibid.*, Vol. XXXI, p. 218)—D. R. B.

proof is wanted, it is afforded by the mention of Vajjanagara in the Kalachuri grant of the year 360 (about A.D. 609),³ which must be Vajñēr in the Chāndavād *śilukā* of the Nāsik District, where it was discovered. I do not urge that the Vajjanagarikā of the Pimpri plates must be this Vajñēr. Probably it is not. But the name Vajñēr is sufficient to show that this must really be the modern form of the ancient name, Vajjanagarikā. As in the Pimpri plates the name given is Vajjanagarikā, it appears that this was in all probability smaller than Vajjanagara of the Vajñēr plates. But there is another Vajñēr, viz., in the Mālegaon *śilukā* on the bank of the river Mōsam, and probably it is this Vajñēr which may represent Vajjanagarikā, if the identification of Mōsini with Mōsam, which is all but certain, is accepted.

2. Vallisikā, and 3. Bhogavardhana.

These localities occur in the Ābhōga plates⁴ of Saṅkaragaṇa of the imperial Kalachuri dynasty. To a Brāhmaṇa of Kallāvana (Kalvan in the Nāsik District) the village Vallisikā in the province of Bhogavardhana is noted as given, while king Saṅkaragaṇa was encamped at Ujjayini. Balhēgaon in the Yeola *śilukā*, about 15 miles from Ujjani, may perhaps be the modern representative of the ancient Vallisikā. The shortened form of Vallisikā would be Valhā and then Balhā, and would further run into the modern longer form Balhēgaon. There is a village called Bōṭe not far from Balhēgaon, which may perhaps be Bhōgavardhana. I would propose another set of villages for consideration. Vallisikā is most probably Vārasi and *v* being interchangeable, and *a* being changed to *i* for the ease of pronunciation, as a conjunct consonant follows, and the *ka* being dropped. This village is about 8 miles from Kalva. Bhōgavardhana very likely must be Bhagurdi, an ancient village in a dilapidated condition just near Ābhōga, *v* taking *amprasdroṇa* and the vowel preceding and following it being dropped. It is worthy of note that the plates were discovered not far from it. Again Bhagurdi seems comparatively older than Bōṭe. Bhagurdi is 8 miles from Kalvan and $\frac{1}{2}$ mile from Ābhōga.

It would be of some use to the antiquarians, if I would note one or two particulars about the above plates, not given in the *Epigraphia Indica*. They belong to Parvatrao Bhānsing Thōkē of Ābhōga in the Kalvan *śilukā*. The plates weigh 132 *tolas* without the rings and the seal, which are missing. (I have taken impressions and plaster casts from them. They were kindly forwarded to me by Mr. L. S. Potnis, Mamlatdar of Kalvan).

4. Chebhatikā.

Chebhatikā occurs in the inscription of Karkarāja, edited by Mr. D. R. Bhaṇḍārkar. He identifies it with simply Chehḍī, in the Niphād *śilukā*. But it is better to call it by its usual name Chehḍī Khurd, to distinguish it from Chehḍī Budruk close to it in the Nāsik *śilukā*.

5. Dadhivāhala and 6. Paḍalāvadaṇa.

These localities occur in the partly forged Daulatābād grant,⁵ edited by Mr. D. R. Bhaṇḍārkar, which prove that Dhruva usurped the throne, deposing Givinda II. Of the boundaries of the village, which appeared to Mr. Bhaṇḍārkar something like Sāmira, two can easily be identified. The village situated on the west is Dadhivāhala. This would naturally assume the form Dahivā, *dahi* being the Prākṛit form of the Sanskrit word *dadhī*. Dahivā is in the Mālegaon *śilukā*. The name of the village on the north is given as Paḍalāvadaṇa, the latter part of which would be dropped and the former would become Pādālād very naturally. It is 4 miles from Dahivā.

³ *Ind.*, July 1913, p. 207.

⁴ *Ep. Ind.*, Vol. VIII., p. 183.

⁵ *Ep. Ind.*, Vol. II., p. 226.

⁶ *Ep. Ind.*, Vol. II., pp. 193 to 195.

BOOK NOTICE.

SIVA-SŪTRA-VIMARŚINĪ AND PRATYABHĪJÑĀ-HRIDAYA, Nos. 2 and 4 of the Kashmir Series of Texts and Studies. By J. C. Chatterji, B.A. (Cantab.) Vidyā-vāridhī. Printed at the Nirṇaya-Sāgar Press, Bombay.

THE Archaeological and Research Department of the Jammu and Kashmir State has been under the distinguished patronage of H. H. the Maharaja Sahib Bahadur, preparing for publication a number of Sanskrit and Kashmiri works, which have so far remained unpublished, and which are called the "Kashmir series of Texts and Studies." The works under review form Nos. 2 and 4 of this comprehensive series. The editor has undoubtedly rendered great service to the cause of Kashmir Śaivism by the publication of these two works. The first gives the *sūtras* called *Śiva-sūtras*, and a commentary on the same by Kṣhemarāja. These *sūtras*, according to tradition, were revealed to Vasugupta, who handed them on to his pupils, who interpreted them in several ways. Kṣhemarāja, the commentator, says at the very beginning, that there lived on the Mahādeva-giri, the great teacher, by name Vasugupta, who, always devoted to the worship of Śiva, received an inspiration from the same. Once, the great Śiva, being moved to pity by the unsatisfactory condition of the world of mortals, inundated as it was with the doctrines of Duality, wished that the doctrine of Unity should be spread, and hence appeared to this Vasugupta in a dream, and gave him to understand thus:—'On this same mountain, on a great slab of stone, there lies the secret; know it and proclaim it to those who are worthy of the favour.' On getting up, Vasugupta searched for the stone. As he approached it, he turned it round with his hand and found his dream realized. This is the origin of the *Śiva-sūtras*.

Kṣhemarāja, who names himself as the pupil of Abhinavagupta, represents one school of interpretation, as opposed to that of Kallaṭa and his followers. It should be noticed here that the *Śiva-sūtras* must not be confounded with the *Spanda-sūtras*, as Bühler seems to do. In his *Kashmir Report of 1875-76*, one manuscript, really containing the *Śiva-sūtras*, which we have before us now, is named *Spanda-sūtra* without any reason.¹ That *Śiva-sūtras* and *Spanda-sūtras* must be the names of two different collections of *sūtras* follows from what Kṣhemarāja remarks on p. 3 of the 1st volume before us—'तत्परम्पर्याप्रदानि सप्तसूत्राणि भस्मानिः सप्तनिर्णये सम्यक् निर्णीतानि । शिवसूत्राणि तु निर्णीतानि ।'—

The *Śiva-sūtras* are divided into three sections, called *namasaka*, dealing with the three remedies of attaining to Unity of Śiva, without which freedom from this worldly existence is impossible. The

three remedies are technically called *śāmbhava*, *śāṅkha* and *dṛṣṭa*. Thus the *Śiva-sūtras* and so the *Vimarśinī* also do not give us any satisfactory idea of what the philosophy of Śaivism is, except only incidentally, but at once proceed to show men, in the words of the editor himself, 'a practical way of realising by experience the fact that man is essentially.....no other than the Deity himself, and of enabling him, in virtue of this realisation, to attain not only to absolute freedom from all that limits him and subjects him, as a helpless creature, to the sorrows and sufferings of limited existence—but also to gain the omniscience like the Deity himself, indeed, as one with him'.

Thus it would be seen at a glance that the *Śiva-sūtra-vimarśinī* is not at all the book with which one should commence his study of Kashmir Śaivism. One is at first likely to think that the *sūtras* may provide us with an outline of Śaivism from the philosophical and argumentative point of view, as is for instance the case with *Nyāya-sūtras*. But the reader is disabused of this illusion as soon as he goes to the fifth *sūtra*. Besides, the over-abundance of the technical terms of the *Mantra-sūtra* and the uncountness of style have rendered the book a hard nut to crack, and in the prose of Kṣhemarāja we miss the fluency and literary finish which characterise many a similar manual of *Vedānta*.

The second volume, however, named *Pratyabhijñā-hridaya* is calculated to be more useful to the beginner than the first, by its very nature. As the name signifies, it aims at giving the essence in brief of the *Pratyabhijñā* or the doctrine of 'Recognition,' in twenty *sūtras* with a commentary on them, by Kṣhemarāja. Thus this book 'bears the same relation to the *Adveśita* Saiva system of Kashmir as the *Vedāntasāra* of Śaṅkara does to the Vedānta system. That is to say, it is intended to be an easy introduction to, and a summary of the doctrines of, the system.'

All the same, one must not be too sanguine about the usefulness of the treatise, in the absence of some preliminary knowledge of Śaivism.

The editor, too, has not come to our help by giving a short sketch in the preface, but he only refers us to his book 'Kashmir Śaivism', which is intended to be a general introduction to the history and doctrine of the system in question, but which, unfortunately, has not seen the light of day as yet.

The *Pratyabhijñā* doctrine, with which both the volumes before us deal, and which is called by the editor, by the general name of Kashmir Śaivism, corresponds really to the *Pratyabhijñā darśana* in

¹ Bühler's *Kashmir Report*, p. clxvii. The same point has been referred to by Sir H. G. Bhattacharya in his 'Report 1883-84. (Section on Śaivism.)

the *Sarva-darśana-saṅgraha* of Mādhavāchārya, and not to the *Saiva-darśana*, which immediately precedes it in the same work. Mādhavāchārya introduces this 'Recognitive system' thus—'Other Māheśvaras are dissatisfied with the views set out in the Śaiva system as erroneous in attributing to motiveless and insentient things causality in regard to the bondage and liberation of transmigrating spirits. They, therefore, seek another system, and proclaim that the construction of the world or series of environments of these spirits is by the mere will of the Supreme Lord. They pronounce that this Supreme Lord, who is at once other than and the same with the several cognitions and cognita, who is identical with the transcendent Self posited by one's own consciousness, by rational proof and by revelation, and who possesses independence, that is, the power of witnessing all things without reference to aught ulterior,¹ gives manifestation in the mirror of one's own soul to all entities, as if they were images reflected upon it. Thus looking upon Recognition as a new method for the attainment of ends, and of the highest end, to all men alike without any the slightest trouble and exertion such as external and internal worship, suppression of the breath and the like, these Māheśvaras set forth the system of Recognition.' The very first *Śiva-sūtra* चैतन्यमात्रा is quoted by Mādhava, and the verse which Mādhava quotes and attributes to Vaṅguptāchārya, viz.—

निरुपादानसंभारनभिन्नादेव तन्वते ।

जगच्चिन्मवस्तस्मै कलाद्राव्याय सृष्टिने ॥

corresponds to the second *sūtra* of Kaṣhemarāja, viz.—'स्वेच्छया स्वभित्तौ विश्वमुन्नीलयति'.

Intelligence is the nature and essence of all. Thus the individual soul is the same as the supreme soul. If it is so, why is the recognition of the same fact necessary? In order to make perfect the sameness which no doubt already exists. And a striking instance to illustrate this is given by Mādhavāchārya. A love-sick woman is not consoled by the mere presence of the lover, unless it is so recognized by her. In the same way, the bondage due to ignorance is not put an end to, unless a recognition of the sameness of the lower and the higher soul, which is always existing, is produced by virtue of the instruction of a teacher, etc.²

One more point to be noticed in connection with *Pratyabhijñā-hrīdaya* is the *sūtra* No. 8 'सद्भुतिकाः सर्वदृष्टेनस्यदयः' and the explanation thereof. The different systems of philosophy, or rather the different views held regarding the various problems of philosophy, for instance, by the Chārvākas, the Naiyāyikas, the Bauddhas, the Mīmāṃsākas, the Pāñcharātras, the Sāṅkhyas and so on, are, the *sūtra* says, only so many stages in the progress of knowledge arising from a more or less partial eclipsing of the real nature of the Supreme Self and of his perfect independence, the final and the most perfect stage being represented by the *Pratyabhijñā* doctrine.

This Kaṣhemarāja, the author of the *Śiva-sūtra-vimartini* and *Pratyabhijñā-hrīdaya*, lived in the first half of the 11th century A. D.³ He was also called by the name of Kaṣhemendra and was the pupil of Abhinava-gupta, and wrote many other treatises amongst which are *Spanda-nirṇaya*, *Śvecchhāṇḍodyota* and commentaries on several Śaiva works.

The get-up of the books is excellent, and the works are, on the whole, carefully and critically edited. Again, the several appendices at the end greatly add to the utility of the volumes. However, we cannot but notice a few defects in the writing of the text. In the first place there is no uniform principle regarding the putting-in of dashes (which are in our opinion generally superfluous) between the different members of a compound word, (see line 8, p. 4, *Śiva-sūtra-vimartini*.) Secondly, the use of commas and semi-colons is not very discreet and sometimes tends to make a sentence even more illegible than otherwise (e. g., the long sentence on p. 6, *Vimartini*). Thirdly, no uniformity is observed in making *śloḥas*. Thus on p. 10 of *Vimartini*, we have 'सत् भवति इति,' 'कथम् अयम्,' and 'बन्ध इत्या...' 'सहितया इतरथा च अकार...' On p. 13 of the same we have 'बन्धो ; यावद्,' On p. 17, we have 'अन्तरऽमेवानु...' where the purpose of the *anagraha* sign is not clearly seen. It is to be sincerely hoped that the editor will attend even to these minor points in the publication of the other volumes of his comprehensive series, to make them flawless, so far as possible.

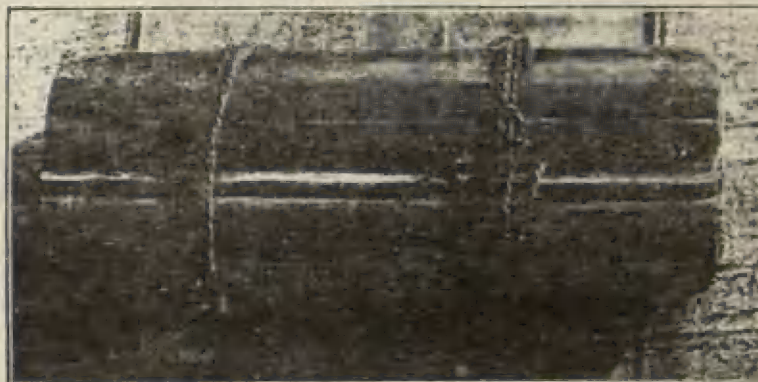
V. S. GHATE.

¹ This is how Professor Gough renders the word 'अनन्यमुखप्रेक्षित्वलक्षणस्यातन्म...' which should be rendered thus: 'independence consisting in not having to look up to the faces of others, i. e., solely depending on himself.'

² मायकगुणगणसंभवप्रवृत्तानुरागा काचन कामिनी मदनविद्वला विरहकेशमसहमाना मदनलखावलम्बनेन स्वावस्थानिवेदनाति विधत्ते, तथा वेगात्तान्त्रिकमदस्वपि तस्मिन्मूर्च्छावलीकितेऽपि तदवलोकनं तर्थायगुणपरामर्शभावे जमसाधारणत्वं प्रापे हृदयंगमभावं न लभते । यदा तु मूर्तिवचनात्तदीयगुणपरामर्शं करोति तदा तत्क्षणमेव पूर्णभावमवेति । एवं स्वात्मनि विविधस्यात्मना भासमानेऽपि तस्मिन्भावं तदीयगुणपरामर्शविरहसमये पूर्णभावं न संप्रादयति । यदा तु मूर्तिवचनादिना सर्वतत्त्वसर्वकर्तृत्वावितलक्षणपरमेश्वरोत्कर्षपरामर्शो जायते तदा तत्क्षणमेव पूर्णत्वतालाभः ।' *Sarva-darśana-saṅgraha* (Ānandashram Sk. Series), p. 79.

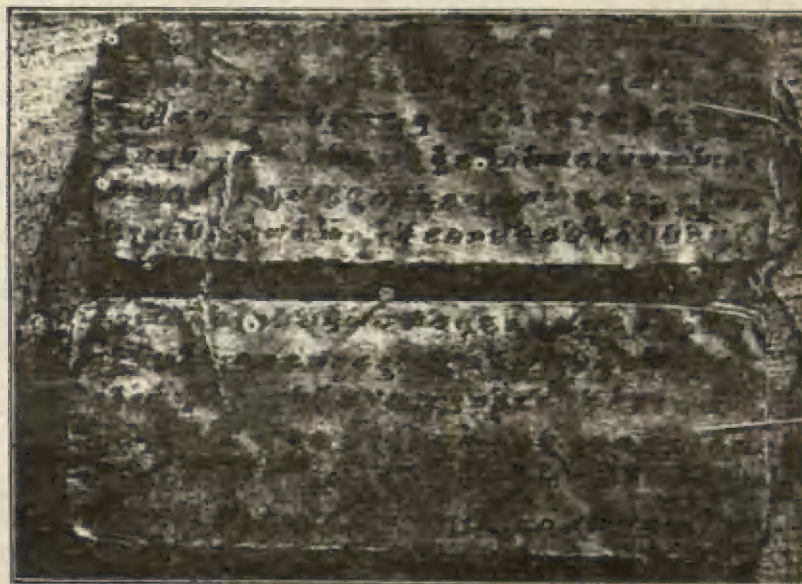
³ Bühler's Report, p. 82.

Fig. 6.



Pöthl found in the Ming-ol of Qiall. (*Unopened*).

Fig. 7.



The same Pöthl. (*Opened*).

THE OBSOLETE TIN CURRENCY AND MONEY OF THE FEDERATED MALAY STATES.

BY SIR R. C. TEMPLE, BART.

(Concluded from p. 254.)

APPENDIX VII.

Synopsis of Malay Currency, 1800-1835.

IN examining the evidence to establish the identity of the Achin five-doit piece I went through the whole of the Malay currency reported by Milburn, *Oriental Commerce*, 2nd ed., 1813, Vol. II, and by Kelly, *Universal Cambist*, 2nd ed., 1835, Vol. I (*s. re.* under East Indies), who includes in his report Milburn's information and that sent him officially. I give here a synopsis of the result. In the following summaries M. stands for Milburn and the figures that follow for the page in his Vol. II; K. stands for Kelly and the figures for the page in his Vol. I.

1.

Spanish Influence Paramount.

Money of Account.

Philippines; Manilla (K. 109, M. 430): Scale.

Proportion	Scale
372	34 maravedi = real
8	8 real = peso (dollar)
	2.

Dutch Influence Paramount.

Money of Account.

(a) Rixdollars of 48 stivers, value 3*s.* 4*d.* Sumatra; Padang (M. 346): Borneo, Banjarmasin (K. 99).

(b) Rixdollars of 48 stivers, value 3*s.* 6*d.* Sumatra; Palembang (K. 112, M. 34).

(c) Rixdollars (value 4*s.* 7*d.*) and stivers. Celebes; Macassar (K. 109, M. 409).

(d) Sp. dollars, value 5*s.* Java; Batavia (K. 100, M. 351): Kaupang (M. 386).

(e) Rixdollars, value 3*s.* 4*d.* and Sp. dollars value 5*s.* 4*d.* (M. 406). Moluccas; Ternate (K. 120, M. 406).

(f) Scales: value of rixdollar 3*s.* 4*d.*

Moluccas; Amboyna (K. 97, M. 396).			Peninsula; Malacca (K. 108; M. 318).		
Proportion.	Scale		Proportion. ¹⁰⁰	Scale.	
192	4 doit	= stiver	192	4 doit	= stiver
48	4 stiver	= dubbeltje	48	6 stiver	= schilling
12	1½ dubbeltje	= schilling ¹			
8	8 schillings	= dollar	8	8 schilling	= dollar

Moluccas; Banda.

(K. 99).

Proportion	Scale
768	16 penning = stiver
48	6 stiver = schilling
	8 schilling = dollar
	(∴ 4 penning = doit)

¹⁰⁰ Cf. 192 pie to the rupan, see ante, p. 106.

¹ Milburn's scale stops at schillings.

Coins in use.

(a) European and Indian.

Java; Batavia (K. 100, M. 351): Sumatra; Padang (M. 346).

(b) European and Indian valued in stivers.²

Moluccas; Amboyna (K. 97): Peninsula; Malacca (K. 100).

(c) Spanish dollars and other coins.

Moluccas; Ternate (K. 120), Sp. dollars³ 4s. 7d. (M. 396), ducateons (4/5 Sp. dollars), crowns at 2% premium on Sp. dollars (K. 120, M. 396); Celebes; Macassar, Sp. dollars⁴ 4s. 7d. European and Indian coins: Sumatra; Palembang (K. 112, M. 347), Sp. dollars 5s. 5d., and holed cash, 500 = 1 parcel, 16 parcels = Sp. dollar = 80,000 cash to the dollar.

3. European Influence.

A Dollar with Native Divisions.

Money of Account.

Peninsula; Selangor (K. 115, M. 316), 8 tampang = rixdollar; Celebes; Macassar (K. 107) 7 mas = rixdollar.

Scales

Sumatra; Singkel (K. 118, M. 332).			Sumatra; Benkulen. (K. 101).		
Proportion.		Scale.	Proportion.		Scale.
64	16 tali ⁵	= suku	32	8 tali ⁶	= suku
	4 suku	= tabil	4	4 suku	= dollar
		= 4 Sp. dollar			
	(∴ suku	= dollar)			
Peninsula; Trengganu. (K. 121, M. 323).					
Proportion.		Scale.			
25,600	400 pitis ⁷	= kupang ⁸			
64	64 kupang	= mas			
16	16 mas	= dollar			
4	4 dollar	= tabil			
	(∴ 6,400 pitis	= dollar)			

Coins in use.

(a) Sp. dollar.

Peninsula; Trengganu (K. 121, M. 323).

(b) Sp. dollar, value 5s.

Sumatra; Singkel (K. 118, M. 332), Benkulen (K. 101).

B. Dollars with mixed Native and European Divisions.

Money of Account.

Scale.

Java; Batavia (K. 100).

Proportion.		Scale.	
48	2 stiver	= cash	
24	3 cash	= tali	
8	2 tali	= suku	
(4	4 suku	= dollar) ⁹	

² Milboorn says, p. 318, "in schillings."³ reported (K. 118) as satallie.⁴ reported (K. 121) as patties; (M. 323) as patties.⁵ Supplied: not in K. 100; suku = one quarter dollar.⁶ I. e., 4/3 rixdollar.⁷ reported (K. 101) as satallie, sataller.⁸ reported (K. 121, M. 323) as cossang.⁹ I. e., 5/4 rixdollar.

5. Indian Influence.

Money of Account.

Sumatra; Natal (K. 112, M. 334), Sp. dollar of 24 fanam or tali; Java; Batavia (K. 100) 50 pitis¹⁰ = stiver, \therefore 15,000 pitis = rupee of 30 stivers.

Scales.

Sumatra; Tapanuli.

(K. 120).

Proportion.	Scale.
400	16½ kōping = fanam
24	24 fanam = dollar

Sumatra; Benkulen.

(K. 101)

Proportion.	Scale.
24	2 single = double fanam fanam
12	6 double = rupee fanam
2	2 rupee = Sp. dollar

(M. 334).

Proportion.	Scale.
400	100 kōping = suku
4	4 suku = dollar

Peninsula; Penang.

(K. 114, M. 299).

Proportion.	Scale.
100	10 pice ¹¹ = kupang
	10 kupang = Sp. dollar
	(\therefore pice = cent)

Coins in use.

(a) Sumatra; Natal (K. 112), Sp. dollars and rupees, also 1, ½, and ¼ fanam; (M. 335) Sp. dollars and 1, 2, 3 fanam pieces; Tapanuli (M. 334) dollars of 24 fanams.

(b) Java; Batavia (K. 100, M. 351) rupee, value 3s. 1½d.

Scales.

(K. 100).

Proportion.	Scale.
120	4 doit = stiver
30	2 stiver = cash
15	1½ cash = dubbeltje
12	3 dubbeltje = schilling
4	4 schilling = rupee

(M. 351).

Proportion.	Scale.
120	4 doit = stiver
30	2½ stiver = dubbeltje
12	3 dubbeltje = schilling
4	4 schilling = rupee

5. Native System.¹²

Money of Account.

(a) in mas and tahl.

Borneo; Sakadana (K. 119).

(b) Chinese cash.

Peninsula; Bintang (Singapore, M. 320); Borneo; Mompasa (M. 418).

(c) Scales.

Java; Batavia (K. 100).

Proportion.	Scale.
400	10 kōpōlōri = cash
40	4 cash = mas
10	10 mas = tahl
	(\therefore tahl = dollar)

Java; Bantam (K. 100, M. 354).

Proportion.	Scale.
10,000	10 pōku ¹³ = laksan
1,000	10 laksan = kati
100	10 kati = uta
10	10 uta ¹⁴ = bahar
25,000 — 30,000	cash = dollar
(\therefore 30 — 40 pōku	= dollar)

¹⁰ Made of lead and tin; proportion 4: 1.¹¹ Proportion of pice to kati of tin, 16: 1.¹² For Achin (K. 97) see ante, p. 253. Milburn, 329, has names for Kelly's 'small mas,' Milburn gives system at Pedir (351), and Analabu (311) as identical with those of Achin, to which these places were subject.¹³ Reported as pure: pōku = Chinese pek, a string of cash; see ante, p. 215.¹⁴ Uta = string of kati here; see ante, p. 215.

Coins in use.

(a) European and Indian.

Peninsula; Bintang (K. 320) = Singapore; Java; Batavia (K. 100, M. 254).

(b) Sp. dollars.

Borneo; Sakadana (K. 119, M. 417); Mompura (M. 418).

(c) Native.

Java; Batavia (K. 100), patak and cash.

Scale.

4 cash	=	mas
8 mas	=	patak
(.24 cash	=	patak)

6. Rough Conditions.

No Coinage.

Currency of Accounts.

(a) Tin.

Peninsula; Tocopa (K. 112), bahar of tin (476 lbs.); Junkceylon (K. 106) "pieces of tin shaped like the under part of a cone," (see ante. p. 19).

(b) Measured linen cloths and paddy¹⁸ (rice in husk).Sulu Archipelago (K. 107, M. 424): Philippines; Magindanso (K. 107, M. 417) in *langan* (coarse cloth) and paddy.

Coins used by Europeans.

(a) Chinese cash.

Philippines; Magindanso (M. 417), 160-180 to a *langan*.

(b) Sp. dollars.

Peninsula; Kedah (M. 296), Pahang (M. 320), Pakanga River, Rian (M. 321), Patani (M. 394): Borneo; Pontiana (M. 417) Sambas (M. 419), "Borneo Town" (M. 420).

(c) Sp. dollars and Portuguese coins.

Java; Deli (M. 386).

(To be continued.)

MISCONCEPTIONS ABOUT THE ANDHRAS.

BY P. T. SRINIVAS IYENGAR, M.A.; VIZAGAPATAM.

Mr. Vincent A. Smith, in p. 194 of his *Early History of India*, 2nd edition, says, "In the days of Chandragupta Maurya and Megasthenes, the Āndhra nation, probably a Dravidian people, now represented by the large population speaking the Telugu language, occupied the deltas of the Godāvari and Krishnā rivers on the Eastern side of India. . . . The capital of the State was then Sri Kākulam, on the lower course of the Krishnā." The only authority for this statement seems to be a passage from the *Trilingānuśāsanam* of Atharvaṇśhārya, quoted by Campbell in his Telugu grammar, where he calls the book *Atharvaṇśhārya vyākaranam*. The passage as translated by Campbell runs as follows:—"Formerly, in the time of Manu Svayambhu, in the Kali age, Hari, the Lord of Andhra, the great Vishnu, the slayer of the Danava Nisumbu, was born in Kakulam, as the son of the monarch Suchandra, and was attended by all the gods as well as revered by all mankind. He having constructed a vast wall connecting Srisaillam, Bhimesvaram and Kalesvaram, with the Mahendra hills, formed in it three gates, in which the three-eyed Išvara, bearing the trident in his hand, and attended by a host of divinities, resided in the form of three lingams. Āndhra Vishnu, assisted by angels, having fought with the great giant Nisumbu for thirteen yugas, killed him in battle, and took up his residence with the sages on the banks of the Godāvari, since which time this country has been named Trilingam. The adherents of Āndhra Vishnu who then resided on the banks of the Godāvari spoke *tatsama* words. In the course of time, these words, not being properly articulated by the unlearned, by the change or obliteration of letters, or by being

¹⁸ Spelt *paly* by Milburn.

contracted, a fourth or a half, became *tadbhavas*. Those words consisting of nouns, verbals and verbs, created by the God Brahma, before the time of Hari, the Lord of Āndhra, are called *atsa* (pure)." Campbell does not quote directly from Atharvaṇśchārya, but takes the passage from the Āndhra-kāṇḍī, which quotes it. A manuscript copy of Atharvaṇśchārya's work is to be found in the Madras Government Oriental Library. Campbell adds in a foot-note that Āndhra Viṣṇu or Āndhrarāyaṇu, as he was also called, is now worshipped as a divinity at Sriakulam on the river Kṛishṇā and, . . . was the patron of Kaṇva, the first Telugu grammarian." The utter worthlessness of Atharvaṇśchārya's testimony for historical purposes is patent on the face of it. There is no Āndhra king of the name of Suchandra. The first king, according to the *Purāṇas*, of the Āndhra dynasty, was Simuka, which name has as variants in the *Purāṇas*, Sindhuka, Sisaka, Sipraka, but not Suchandra. Secondly, Atharvaṇśchārya quotes in his book a number of authorities, e. g. Viṣṇu, Indra, Brihaspati, Somachandra or Hemachandra, Kaṇva, Pushpadanta, Dharmarāja, all giving pronouncements on Telugu, but none traceable anywhere. Atharvaṇśchārya also gives a quotation there which, he pretends, is from the *Ātharvaṇśchārya Upaniṣad*, but it is not found in that *Upaniṣad*. From this we may infer that the quotations were made up by Atharvaṇśchārya. This author is desperately anxious to prove that Telugu may be used in books and has hence manufactured these quotations. Possibly Atharvaṇśchārya is the pseudonym of a Telugu writer, whose use of Telugu in books was attacked by the parists of the day and who resorted to this method of defending his procedure. This work of Atharvaṇśchārya has not yet been printed, but a *kārikā* professing to be from the same man has been printed and it reveals the fact that the author has stolen numerous stanzas from Daṇḍin's *Kāvyādarśa* without even the acknowledgement 'iti'. Thirdly, Atharvaṇśchārya quotes the so-called *Vālmīki-sūtras* on Prakṛit. These *sūtras* have been proved to be the composition of Trivikrama,¹ who lived in the 14th century. Hence Atharvaṇśchārya must have lived later. The statement of Atharvaṇśchārya, that Āndhra Viṣṇu lived on the banks of the Godāvari, shows that he was a late writer who lived long after Rājahmundry became the capital of Telugu Rājās.

The earliest reference to the Āndhras is the passage in the *Āitareya-Brahmaṇa*² where the Āndhras, Paṇḍras, Sabaras, Pulindas and other Dasyu tribes living on the borders of the Aryan tribes, are said to be the descendants of the exiled sons of Viśvāmitra. As the Aryan cult did not extend beyond the Vindhya in those days, these tribes must have then lived in the Vindhyan region. Even in the age of Bāṇa (7th century A. D.) the Sabaras are mentioned in the *Kaddambari* as living in the Vindhyan forests. The next reliable³ reference to the Āndhras is that in Aśoka's Rock Edict XIII, where he claims "the Āndhras and Pulindas" as people in his dominions, who, among others, followed the *dharma* he taught so vigorously. It is to be noted that the Āndhras are here grouped together with the Pulindas, thus showing that they were still living in the central parts of the Peninsula, not far from the Vindhyan range. Soon after Aśoka's death the Āndhras rose to prominence. Rāya Simuka Sātavāhana, who, according to Mr. Vincent A. Smith, lived about 220 B. C., was the first king of the dynasty. His name, as well as that of a later Āndhra king, Sīri Sātakaṇi, are cut under figures of persons in the back wall of a cave at Nānāghāt.⁴ The next king was Kṛishṇa, whose lieutenant scooped out a cave at Nasik, which was apparently his capital. The next reference to Āndhra kings is found in the inscription of Khāravela, king of Kālīṅga, in the Hāthigumphā cave,⁵ where Khāravela says that in the

¹ *Ants*, Vol. XI, p. 219 ff.

² VII. 18; also *Sāukhāyana-sūtra*, XV. 16

³ The reference to "the Pāṇḍyas, Drāviḍas, Uḍras, Keralas and Āndhras" in *Saṅkhya-parvan*, XXXI and to "the Āndhras, Pāṇḍyas, Cholas and Keralas" in *Rāmāyaṇa*, iv. 41 are not useful for historical purposes, from the fact that these *Itihāṣas* have been the result of centuries of growth. The references may prove that either the final redaction of the *Itihāṣas* was made, or at least the particular *Itihāṣas* were composed not earlier than the 3rd century, B. C. when these states rose to fame and were first mentioned together.

⁴ *Arch. Surv. West. Ind.*, Vol. V, p. 39.

⁵ *Tr. In Or. Cos.* III, p. 174.

second year of his reign (168 B. C.) "Sātakaṇi, protecting the west sent a numerous army of horses, elephants, men and chariots" apparently to help him in his operations against Magadha. This Sātakaṇi was either the third or fifth king of the list of Āndhra kings in the *Matsya-Purāṇa*. The Āndhra territory was hence, still in "the west" of Kāliṅga. Next comes the cave inscription at Pitalkhora near Chāliśgaon cut in characters of the 2nd century B. C. and referring to the king at Paithān or Pratishthāna. The centre of Āndhra influence is still in western India.⁶ The next Āndhra king we hear of is Hāla, the 17th king, who, according to Mr. Vincent A. Smith lived *circa* 68 A. D. The *Bṛihat-kathā*, the original of Kāśhemendra's *Bṛihat-kathā-mañjari* and Somadeva's *Kathā-sarit-sāgara*, said to have been written in the Pāṇḍichī dialect by Guṇādhya, was composed, according to tradition, for the sake of this king's wife, who must, therefore, have been a northern princess. Hāla is the reputed author of *Saptakathā*, an anthology of erotic verses in the ancient Mahārāṣṭrī tongue. This fact and the other one, that the Āndhra inscriptions are all in some form of Prākṛit, prove that the Āndhras spoke some kind of proto-Mahārāṣṭrī. In modern usage Āndhra means Telugu; and hence many historians assume that the ancient Āndhras spoke Telugu. Sir Walter Elliot in his discussion of the question in the *Numismata Orientalia*,⁷ hopelessly mixes up the Kāliṅgas, the Triglypton of Ptolemy, Trikalīṅgam, Triliṅgam, Telugus, and Āndhras and takes an imaginary Kāliṅga-Āndhra tribe to have migrated from the Gangetic region, the Āndhra tribe separating off in Orissa, first settling on the Chilka Lake, then going down the coast to the Godāvari-Krishṇā valley and shooting up into the Deccan, and accomplishing this itinerary in an impossibly short space of time! Not to speak of the blending into one of so many tribes by Sir Walter Elliot, even the assumption that the ancient Āndhras spoke Telugu is an entirely gratuitous one. If the ancient Āndhras had been Telugus, Telugu literature would have been born in the early years of the Christian era, in the palmy days of Āndhra supremacy in India, whereas its birth took place in the 11th century A. D. when undoubted Telugu princes, *i. e.* princes whose mother-tongue was Telugu, whatever their (ultimate) origin, reigned in the Telugu country.

The next reference to the Āndhras is in Pliny (77. A.D.)⁸ where he says that "the Āndhra territory, stronger (than other territories of India) included thirty walled towns, besides numerous villages, and the army consisted of 100,000 infantry, 2,000 cavalry, and 1,000 elephants." The Āndhras must have been dominant throughout India at this epoch, as references to them are found in inscriptions in various parts of India. Their sway extended from sea to sea in Central India and up to Sāñchi in the north.⁹ The *Periplus*, which was written at about the same time as Pliny's *Natural History*, says, "Beyond Barygaza (Broach), the adjoining coast extends in a straight line from north to south; and so this region is called Dachinabades, for *Dachinos* in the language of the natives means south. The inland country back from the coast towards the east comprises many desert regions and great mountains; and all kinds of wild beasts—leopards, tigers, elephants, enormous serpents, hyenas, and baboons of many sorts; and many populous nations, as far as the Ganges. This is the first clear¹⁰ reference to the Āndhra country by the name Dakṣiṇāpātha, which still survives as the Deccan.

⁶ *Bom. Gaz.* I. B. p. 147.

⁷ *Hist. Nat.* VI. 224.

⁸ P. 16.

⁹ *Ep. Ind.* II. 83.

¹⁰ Dakṣiṇāpādā is mentioned in the *Big-Pada* vii. 33-6 as a place of exile; it meant of course the Vindhyan region, which was in those days outside the pale of the Aryan fire-cult. Dakṣiṇāpātha occurs in the *Paundrāyana Dharma-sūtra* (I. i. 2, 13), coupled with Saurāṣṭra. It occurs in the *Mahābhārata*, *Saṅkhya-Purāṇa*, xxi. 17, when Saṅkadeva is said to have gone to the Dakṣiṇāpātha after defeating the Pulindas and the Pūṇḍras. In Patañjali's *Mahābhāṣya* on Pīpīni, I. i. 19, also, the word Dakṣiṇāpātha occurs. In all these places it probably means the Andhra territory, but we cannot be certain that it is so. In the *Purāṇas*, Dakṣiṇāpātha is clearly defined, but we cannot use it in historical investigations, since the question of the dates of the composition of the *Purāṇas* is a hopeless of solution. Similarly the Andhra country is, in the *Saṅkṣipta-gamāntara*, said to be above Jagannāth and behind Bhramarīmūka, and the next country is said to be Saurāṣṭra (*Vide Saṅkṣipta-pādama* i. 106 *etc.*). This latter work is apparently a recent one and is absolutely unauthoritative.

The *Periplus* mentions Paithân as one of the two principal market-towns of Dacinabades ; and then refers to another market-town on the coast, "the city of Calliena, which in the time of the elder Saraganus became a lawful market-town ; but since it came into the possession of Sandanes the port is much obstructed and Greek ships lying there may chance to be taken to Barygaza under guard." Calliena is certainly the modern Kalyân, near Bombay. Saraganus is probably Sâtakapi, the title used by most Ândhra kings ; and Sandanes is Sundara, the 20th Ândhra king, in the *Matsya-Purâṇa* list ; if so, the elder Sarganus is perhaps his immediate predecessor, Palindasêna (a noteworthy name associating the Palindas still with the Ândhras), also called Parindrasena, during whose time, Sundara was, as usual in ancient India, viceroy of part of the country. Kalyân was in the district administered by Sundara. By this time Saka Satraps of the Kshaharîṣṭa clan had risen to power in Gujarat and seized some of the northern territories of the Ândhras, their early leaders being Bhûmaka and Nahapâna. The initial date of the Saka era is by some historians held to mark the establishment of Saka power under Nahapâna ; if this is correct, Nambanus, whom the *Periplus* names as the king of the country round Barygaza is probably the same as Nahapâna ; whether this identification is correct or not, it is certain the rise of Saka power in this age made the port of Kalyân dangerous to foreign ships, the Ândhra viceroy not being able to guard the post efficiently, against Saka depredations.

The Sakas and the Āndhras were in constant conflict from this time and the Āndhras gradually lost their western dominions and were driven to the east. Viṣṇuvākyura II¹¹ fought with them in 126 A. D., and his mother Balasiri tells us in the Nāsik cave Inscription¹² that her son "destroyed the Sakas," but we find that the Sakas continued to reign at Ujjain till Chandragupta II. Vikramāditya, extinguished the dynasty about 409 A. D.; Rudradāman, the Saka Satrap, fought with his son-in-law, "the lord of Dakṣhiṇāpatha," Puṣyamāyī, son of Viṣṇuvākyura II,¹³ and desisted from destroying him, because he was his son-in-law, in 150 A. D.¹⁴

This phrase "destroyed the Sakas," used in Balasiri's inscription, like all other phrases therein descriptive of Vijivāyakura, ought to be taken with many grains of salt, for they form a mere eulogy of the king composed by a court-poet, and secondly, subsequent events have disproved the destruction of the Sakas and the consequent stoppage of the "contamination of the four castes" (also referred to in the eulogy), Puṣamāyi, son of Vijivāyakura and king while this inscription was incised, having married the daughter of the Saka Rudradāman. But yet Elliot and others have deduced from this phrase that Vijivāyakura was the head of a great revolution and gained a national victory; Cunningham has gone one better and made him found the great Saka era, in commemoration of the event.

Ptolemy, the geographer, (in his *Geog.*, VII. 17) writing in 151 A. D., after describing Larike, the Lāt or Gujarāt coast, describes the Ariake coast (a name used by the *Periplus* also), which he divides into two parts, Ariake Sadinon and Ariake Andron Peiratōn. The latter phrase is usually translated Ariake of the Pirates, but Sir James Campbell in *Bom. Gaz.*, Thana, ii, 415,

" From Vijāyākura I, the Āndhra kings used metronymic titles. e.g. Vāmīlputra, Māghariputra, Gotamiputra, etc., just as in Vedic times people were called Kaudilputra, Kantalputra, Ālamtiputra, Vaiśāgrahapadiputra, etc. Does this mean that the Āndhras were now definitely drawn into the Brāhmaṇ polity and recognized as orthodox Kshatriyas, bearing names like the hallowed ones in the Vedas? It certainly does not warrant Sir Theodor Kohatriyas, bearing names like the hallowed ones in the Vedas? It certainly does not warrant Sir Walter Elliot's conclusion that one of the Rājās that bear metronymics, i.e., the third of them, Vijāyākura II. Walter Elliot's conclusion that one of the Rājās that bear metronymics, i.e., the third of them, Vijāyākura II. Gotamiputra Śittakagi, was "a bold adventurer" who seized the throne; this Sir Walter Elliot has inferred because the mother's name "is found so remarkably associated with that of her son." (*Nam. Orient* p. 19). That this deduction is absolutely unwarranted will be readily seen if it is remembered that dozens of Vedic names are metronymic and among the later Āndhra kings, at least seven have a similar title.

¹ *Ex. Ind. will.*, 61.

¹² Another view regarding Vijāyākura and the son-in-law of Rudradāman has been set forth in my *Epigraphic Notes and Questions*, nos. IV and V published in the *Jour. Bomb. As. Soc.*, Vol. XXIII—D. R. B.

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argues that the phrase means Ariake¹² of the Āndhrabhrīyaa. Besides this, Ptolemy mentions (Jb. vii. 1. 82) Baithana as the royal seat of Siro Polemaios and Hippokoura as the royal seat of Balaokouros. The former is certainly Paithan, the capital of Siri Puṣumāyi or Puṣumāvi, and the latter place, which is identified with Kolhāpur, by most authorities was the royal seat of Viṣivāyakura II. Puṣumāyi was his son and viceroy (*yuvārāja*) at Paithan. In an inscription in a cave-temple at Nasik of Puṣumāyi's time occurs the phrase *Dhanakataśamanchi*, meaning by the Samapas of Dhanakata. Dr. R. G. Bhandarkar has suggested that this may be a wrong reading and the original may be read as *Dhanakata-sāminchi* or *Dhanakata-sāmiyehi*, by the lord of Dhanakata¹³ (ka). Bhandarkar is clearly wrong, as Senart points out in *Ep. Ind.* viii. 69, Dhanakata is a hypothetical name, and the actual names of the place near Amarāvati being Dhamnākatā¹⁴ in the fourth century A. D., Dhanakata (*vide infra*), Hsien Tsang's To-na-kie-tse-kia,¹⁵ Dhānayavāṭipura in an inscription of 1361 A. D., and Dhanakota of modern times. Thus the name Dhanakata is as much a myth as that Amarāvati or any place near it was an Āndhra capital. Senart himself guesses that Dhanakata is a misreading for Benākata, which occurs in another inscription of the same reign. This conjecture of Bhandarkar's is the only source of the assertion made by most writers on Āndhra history that Dhanakata, near Amarāvati, was the Āndhra capital from the time of the second Āndhra king, Kṛishṇa. Among others, Burgess¹⁶ makes this statement without giving the authority for it and also needlessly accuses the Āndhra kings of constantly changing their capitals. About 200 A. D. Nāgārjuna is said in a Tibetan life of his, to have "surrounded Dhanakata with a railing." I-t'ing, the Chinese traveller, says that Nāgārjuna's patron was of the So-to-pho-han-na family; Hsien Tsang calls him So-to-pho-lo. These names are probably to be equated with Sātakaṇi or Sātavāhana, the proper name of the king being either Siri Puṣumāvi or Siri Yaśa.¹⁷ It is noteworthy that among the numerous scraps of inscriptions found at Amarāvati, the only¹⁸ reference to an Āndhra king is V [dā] [h] [r] [p] [u] [t] [a] [s] [a] [d] [m] [r] [i] Siri Puṣumāsa sapachhara. This itself is sufficient proof that the place is wrongly called Dhanakata was never the capital of the Āndhras. Another late Āndhra inscription is the one found in the Kṛishṇā district of the 27th year *raño Gotamiputasa araka siri Yaśa Sātakanisa*.¹⁹

Numismatic evidence, so far as has been obtained, corroborates the above view. The legends of the Āndhra coins are all in Prakṛit, as their inscriptions are. The earliest Āndhra coins are two, bearing the name of Siri Sata (c. 68 A. D.) and the so-called Ujjain symbol—the cross and balls device, which probably originated in Mālwā. The "bow and arrow" coins of Viṣivāyakura I, Sivālakura and Viṣivāyakura II (84 A. D.—138 A. D.) were all found only at Kolhāpur. The later coins of the latter half of the second century and the early part of the third century, i. e., those of Puṣumāyi and his successors (138 A. D.—229 A. D.) have been found only in the Godāvari and the Kṛishṇā districts, which alone formed the dominion of the later Āndhras when the Sakas on the west and the Pallavas in the south hemmed them in. Mr. Vincent A. Smith who has discussed the Āndhra coinage in *Z. D. M. G.* 1903, has remarked that "the Āndhra coinage, although geographically to be classed with the southern issues, is Northern and Western in its

¹² Ptolemy mentions *Larika*, *Ariake*, and *Damirika* as being in the west coast of India. *Larika* has been unanimously held to be the *Edika* country, that of the Lāta. So *Damirika* was the Hellenised form of a possible *Dramidaka*, (the country) of the *Dramidas* or *Dravidas*. *Damirika* has been identified with the Tamil word *Tamiragam*, but the uniform ending *ka* indicates an identity of origin and *ka* is therefore the Sanskrit suffix *ka*. *Ariake* has baffled most people. Has it anything to do with *Ariyaka*, supposed to be the original of the title *Araka*, meaning lord, a title given to Siri Yaśa (*Ep. Ind.* i. 90) and *Mahā araka*, equivalent to *Mahā Araka*, an obscure word which occurs in Puṣumāyi's inscription above referred to? The expression is *maha-arakama edana*. The reading of the latter word and the meaning of both are involved in doubt.

¹³ I regret I cannot bring myself to agree with the French savant in this respect. What is read as *Dhanakata* can also be read as *Dhamnakata*; and as, in Nasik inscriptions, *n* is used instead of *d* (compare e. g. *daṇḍapāṇi* of the same Nasik inscription), *Dhamnakata* can very well be taken to be equivalent to *Dhamnakata*. Sir R. G. Bhandarkar's view, therefore, still stands incontrovertible.—D. E. B.

¹⁴ *A. S. S. I. Amar. and Jap.* p. 90.

¹⁵ *A. S. S. I. Amar. and Jap.* p. 4.

¹⁶ It is not possible to identify *Raśa Sivamaka Sada* of Amarāvati (*A. S. S. I. Amar. and Jap.* p. 61) or *Raśa Mahāripata Ikhāṇḍan siri Vīrapurīśadatta* of Jagayyapāṭa (ib. 110.)

¹⁷ *Ante* xi. 95.

¹⁸ *Jb.* pp. 7-13.

¹⁹ *A. S. S. I. Amar. and Jap.* p. 61.

²⁰ *Ep. Ind.* i. 90.

affinities, and has nothing in common with the peculiar coinage of the South." The gratuitous assumption that the Āndhras were a south-eastern tribe is the cause of this apparent anomaly. It has been proved above that there is not a shadow of evidence to assume that the original home of the Āndhras was the east coast of south India and all reliable documents indicate that their original home was south of the Vindhyan, as their coins also prove.

In the third century A. D., the Āndhra dominions in the west passed into the hands of the Sakas whose capital was Ujjain. The eastern Āndhra territory was acquired by the Pallavas, the earliest king of which dynasty, so far as has been made out from epigraphical evidence, was Sivaskandavarmā. The Pallava capital was Kāñchīpuram and the Āndhra district of the Pallavas was called 'Āndhrāpatha.'²³ This name, translated into Tamil, Vaṇḍugavaḷi, 12,000, was in use even in the 9th century A. D.²⁴ Dhāṇakāḍa, which is the same as Dhāmīakāḍa of the Amarāvati inscription already referred to, was the capital of a Pallava governor in Sivaskandavarma's time, at about the beginning of the fourth century. Now for the first²⁵ time we hear of Dhāṇyakāḍa as a capital of any kind. In the year 340 A. D. when Samudragupta went round India on a *digvijaya* tour, he vanquished Hastivarmā of Vēṅgi (now Pedda Vēgi, eight miles north of Ellore), a Pallava viceroy of another part of the Āndhrāmaṇḍalam wrested from the Āndhra King by the Pallavas. Vēṅgi was also called Āndhranagaram.²⁶ But the Āndhra kings and the Āndhra tribes have disappeared without any trace from the 3rd century A. D. We do not hear of them in Samudragupta's inscription, nor in the *Raghuvamśa* where a *digvijaya* similar to that of the great Gupta conqueror is attributed to the mythical Raghu. The word Āndhra now became the name of a territory. As such it is mentioned by Hiouen Tsang, who visited the province in the 7th century A. D., about 30 years after the Eastern Chālukya dynasty was founded at Vēṅgi by Kubja Viśhṇu-varddhana. The Chinese traveller says that he went from (southern) Kosala (Berar) to the country of Āndhra ('An-ta-lo), "through a great forest, south, after 900 li or so." He calls its capital Ping-ki-lo (P Vēṅgināḍu). He says that not far from the city is "a great Saṅghārāma with storeyed towers and balconies beautifully carved and ornamented." The extensive Buddhist ruins at Guntupalli, 16 miles from Pedda Vēgi, are perhaps relics of this Saṅghārāma. "These consist of a chaitya cave, a circular chamber with a simple façade containing a *dāgaba* cut in the solid rock, and several sets of viḥāra caves with entrance halls and chambers on each side."²⁷ Hiouen Tsang says of the Āndhra country, "The soil is rich and fertile; it is regularly cultivated and produces abundance of cereals. The temperature is hot." This applies very well to the Ellore Taluk, which is the modern representative of the ancient Vēṅgirāshṭram. Hiouen Tsang also says, "the language and arrangement of sentences differ from Mid-India (where Kosala was) but with reference to the shapes of the letters, they are nearly the same." The language referred to by the keenly observant Chinese traveller, is the Proto-Telugu evolved in the Godāvari-Krishṇā valley, the (later) literary form of which was used by Nannayya Bhaṭṭa, the author of the Telugu *Mahābhārata*, who lived in the 11th century, and, who, so far as I can discover, was the first person to call the Telugu language by the name of Āndhra.

We thus find that the Āndhras were a Vindhyan tribe and that the Āndhra kings originally ruled over western India and spoke Prākṛit and not Telugu. The extension of Āndhra power was from the west to the east down the Godāvari-Krishṇā valley. When their power declined in the west, the name Āndhrāmaṇḍalam travelled to their eastern provinces and stuck to it under Pallava as well as Eastern Chālukya rule. The word Āndhra was first a tribal name; then it became the name of a dynasty of kings, who ruled in the west; and then it became the name of a language which evolved in the east sometime before the eleventh century. Whence and when and how Telugu arose, what influences fostered its inception and growth is, however, another and a more complicated story, which will be told in a future article.

²³ A. S. I. 06-07 p. 323.

²⁴ The next occasion when Dhāmīakāḍa is called a capital is in Hiouen Tsang's description of the place, when it continued to be, it is presumed, the capital of a Pallava viceroy.

²⁵ *Dakṣaśāstrakṛitāṃ*, vii.

²⁶ S. I. I., iii, p. 90.

²⁷ *Imp. Gaz., Ind.*, xii, 832.

ROCK EDICT VI OF ASOKA.

BY KASHI-PRASAD JAYASWAL, M.A. (OXON.), BARRISTER-AT-LAW, CALCUTTA.

THE passage:

य च किंचि दुस्तो आसपयानि स्व
 उपकं वा ज्ञापकं वा व वा पुन
 महामयेसु आचारिके¹ आरोपितं भवति
 तस्य अयास विचारो निभृती व संतो
 परिशयं आनंतरं पटिवेदितव्यं मे सर्वत्र
 सर्वे काले एवं मया आसपितं [1]

(Girnār, lines 5-7)

has been translated by Bühler as follows:—

"Moreover, if, with respect to any thing which I order by (word of) mouth to be given or to be obeyed as a command, or which as a pressing (matter) is entrusted to my officials, a dispute or "a fraud happens in the committee (of any caste or sect), I have given orders that it shall be brought forthwith to my cognisance in any place and at any time."²

In the above translation the word *nijhatti*³ has been rendered as "fraud." I could not trace Dr. Bühler's ground for adopting this meaning. No explanation has been offered by him in his articles on the edicts published in the *Zeitschrift d. Deutschen Morg. Gesellschaft*, vols. 43 and 44 and the *Epigraphia Indica*, vol. 2. I do not think there is any warrant for this rendering. The source of the mistake seems to lie in M. Senart's remarks on *nikati*, an incorrect reading of *nijhatti*: "Le sens de "bassesse, fraude," atteste pour le pâli *nikati* et son prototype sanskrit *nikriti*, s'accorde très bien avec de voisinage de *virado* "désunion, querelle."⁴ But the reading *nikati*, as Bühler himself pointed out, was wrong, *jha* being quite distinct in all the recensions. If *nikati* meant 'fraud,' there is no reason why *nijhatti* also should mean the same. The two are not one and the same word.

Jha in Aśokan phonetics, as in Pāli, represents either *dhya* (𑀧𑀸𑀓) or *kha* (𑀧𑀸𑀓) of Samskrūta, e. g., the *jha* in the *nijhapayitave*⁵ and *nijhattiyā*⁶ which, as M. Senart pointed out,⁷ are derived from the Sans. 𑀧𑀸 + 𑀸𑀓, and the *jha* in the *jhapeti* of the Pillar Edict V., which comes from the Samskrūta *kha* (𑀧𑀸𑀓) (Childers). The *nijhatti* of our Rock Edict would therefore represent either **nidhyati* (**nidhyatti*) or **nikhathi* (**nikshapti*). The context shows that it does not stand for *nidhyatti* or a similar expression connected with *nidhyai*, 'to be attentive,' 'to reflect.' For if in respect of the royal order, there was to be seen, in the parishat *nidhyati*, 'attention' or 'reflection,' the king would not have been in a desperate hurry to be told of it "forthwith" and at all hours and in all places. It is evident that some unsatisfactory conduct on the part of the parishat is meant by *nijhatti*. And this sense we do get from the other restoration, *nikshapti* (or *nikshipti*), 'casting away,' 'throwing down,' or the act of 'rejection.' In respect of an order given to the Mahāmātras if there happened or was going to happen (संती) in the parishat a division (*virado*) or a total rejection of the order (*nikshapa*), the king was to be informed forthwith at whatsoever place he might be and whichever hour it might be. The sense becomes still clearer with an appreciation of the real import of the *parid*.

¹ The stroke attached to *hi* is unmistakable, the projection being clearly noticeable beyond the abrasion. See the facsimile in the *Ep. Ind.*, II, facing p. 454.

² *Ep. Ind.*, vol. II, p. 468.

³ In other recensions *nijhatti*.

⁴ *Les inscriptions de Piyadasi*, I, 157. It must be at the same time noticed that M. Senart himself in translating the edict (p. 173) does not adopt "bassesse" or "fraude" but "division" as the meaning of the supposed *nikati*.

⁵ Pillar Edict IV.

⁶ *Les Ins. de Piy.*, II, 39, 34.

⁷ Pillar Edict VII, 2.

Parishat: M. Senart takes it to be synonymous with *saṅgha*⁸ and Bühler, as the committee of caste or sect. It is obvious that Bühler's importation of caste or sect is too far-fetched and does not suit the context at all. *Tōya athāya* qualifies the whole sentence. The dispute which might arise in the parishat would be a dispute in the matter of an order charged to the Mahāmātras and in respect of matters charged to the Mahāmātras a discussion could hardly be expected to arise in a council of caste or sect. The same objection applies to M. Senart's *l'assemblée du clergé*. I do not think anybody would suggest that the Mahāmātras figured as members of the *saṅgha*. That the parishat was the parishat of the Mahāmātras is a conclusion which is forced upon us by the context. This conclusion receives confirmation from an independent source, which I propose to notice after commenting on the term *Mahāmātra*.

The confusion with regard to the meaning of this expression has been removed by the recent rendering,⁹ 'the High Ministers.' This rendering is confirmed by the *Arthashastra*, the Mahāmātras there are the Highest Ministers.¹⁰ I think the term Mahāmātra, "of high (higher) authority," distinguished the Mahāmātra class of ministers from the inferior ministers. Dr. Fleet has noticed in the inscriptions of the Gupta period two grades of offices distinguished from each other by the addition *mahā* to particular offices. For the sake of comparison I would draw attention to a passage of the *Sakra-nīti*, which lays down that each minister in charge of a portfolio was to have two ministers under him as juniors (ii. 109).

For the council-of-ministers we have a technical expression in the *Arthashastra*, the *mantri-parishat*.

मन्त्रिपरिषद् द्वादशानाम्बाज् कुर्वतिति मानवाः (p. 29)

इन्द्रस्य हि मन्त्र (Sic)- परिषदुदीक्षां सहस्रम् (p. 29)

मन्त्रिपरिषद् चाह्व्य दूयात् (p. 29)

पञ्चने मन्त्रिपरिषदा पञ्चसंप्रैषयेन मन्त्रयेत् (p. 38)

In the edict we have वा पुन नहानवेत् आचार्यिके चारोपिं भवति. In the *Arthashastra* we are told that an *ādyāyika* business had to be entrusted to the parishat whose decision was to be followed in the matter: आचार्यिके कार्ये मन्त्रिणो मन्त्रिपरिषद् चाह्व्य दूयात्। तत्र बहुविधाः कार्यसिद्धिकरं वा नृपस्तत्कुर्वन्तः। (p. 29)

"In case of an *ādyāyika* business the *mantri-parishat* of the ministers shall be called and told (the business). Therein what the majority says or whatever for the success of the matter they tell, shall be done."¹¹

In the light of this evidence as well as the other considerations put forward above there seems to be a strong ground to hold that the parishat of the edict is the *mantri-parishat* of the *Arthashastra*. The edict, which is purely an administrative one, exhibits the emperor's dissatisfaction at the restiveness of his ministers with regard to his certain commands.¹² That the ministers had such wide powers as to be in a position to offer opposition in certain matters can be gathered also by the data of the Greek writers¹³.

⁸ i. 157.

⁹ Cf. Fleet, *J. R. A. S.*, 1909, p. 297.
¹⁰ At the anointment of a sovereign, who is a minor, the Mahāmātras are told. 'He is only the symbol, you are the real sovereign' (ed. Mysore, 1909, p. 254. अत्रनामोयं भवन्त एव स्वामिनः). It is they who collectively deal with the annual account sheets of the provinces sent to the capital (p. 64. प्रचारसमं नहानावास्तमयाः आचयेदुः + +).

¹¹ Cf. also the *Sakra-Nīti* (II. 3).

सम्भाषिकारिपकृतिसमासस्थपने स्थितः ।

सर्वथा स्वाह्वः प्राप्तः स्वपते न कदाचन ॥

¹² This explanation supports the tradition of the *Diyaśāśana* that Rādhagupta opposed the gifts of the king to the Buddhist Brotherhood.

¹³ Cf. 'Hence (the "Councillors of State who advise the king") enjoy the prerogative of choosing governors, chiefs of provinces, deputy governors, superintendents of the treasury, generals of the army, admirals of the navy, controllers and commissioners who superintend agriculture.' Arrian, *Indica*, XII.

I propose to translate the passage as follows :—

"If, again, in the matter of anything that I myself order by word of mouth—either (an order) to be issued (to be given,¹⁴ *वाक्*) or to be proclaimed (*आवाहक*)—or, again, in the matter of anything urgent that is charged to the *Mahāmātras*, a division or rejection is taking place (*सन्तो*) in the council, without any interval I must be informed at all places and at all hours. This has been ordered by me."

Mukhato: This signifies that the orders were not always given by word of mouth. In this connexion I would refer to a rule of the *śāstrī* as surviving in the *Sukramiti*, viz., that orders by the king should not be given otherwise than in writing, and if an order was otherwise given it was not to be obeyed by the public servant, 'for it is the royal signet which is the king and not the king himself'¹⁵.

FOLK-LORE FROM THE NIZAM'S DOMINIONS.

BY M. N. CHITTANAH.

No. 1. The King and His devoted Minister.

There lived once upon a time a king and his faithful minister. They loved and trusted each other much. Their love was so great that when anything ever happened to the king the minister felt as if it had happened to him. Likewise the king also felt in the same way if anything ever happened to the minister.

On one occasion, a dealer in swords and other arms and weapons came to the king and showed him his wares. The king, while examining one of the swords unfortunately cut off his little finger because it was so sharp. He immediately informed his beloved minister of this accident and wanted him to see to come at once. But the Minister, to the utter amazement of the king, instead of running to his aid and comforting and sympathizing with his royal master, sent back his reply in these words.

"Whatever God does is done well

Though the reason why to tell."

When the messengers brought to the king this unexpected reply, his anger knew no bounds, and he at once caused his minister to be dismissed and appointed another man in his place.

Some days after, the king went out hunting. While chasing a deer, he lost himself in a thick forest, which was the den of one hundred and one notorious robbers. It happened to be the festival of their presiding and protecting deity, to whom they offered a human sacrifice annually. Every preparation was ready and the only want was the required sacrifice. So they took it as good luck that they chanced to meet the unfortunate king. Thinking him to be the gift of the goddess, who had been pleased to help them in times of difficulties and utter want and disappointment, they hastened to perform the sacrifice. While they were engaged in bringing the king to the altar, the chief robber's glance happened to fall on the king's missing finger. He at once bawled out to his comrades and showed the defect in the sacrifice to be offered. In sorrow and anguish they let the victim go free.

On returning to the palace, he remembered the minister's wise words at the time of the loss of his little finger, which had saved him now from the hands of the murderous band of robbers and reinstated his wise and learned minister to his former place, passing the remainder of their days in blessed harmony of peace and pleasure.

¹⁴ *dāpakam* might mean a fiscal order. Cf. सर्वान् वा दापयेत् करान्. *Arthashastra*, p. 57.

¹⁵ न कार्यं भूतकः कुर्वीत नृपजेष्टादिना कथितम्।

नाज्ञापयेत्तेष्वनेन विनाल्पं वा महत्तुः ॥ II. 290

नृपसंचितं ज्ञेयं नृपस्तत्र नृपो नृपः ॥ II. 292. (*Jivānanda's ed.*)

¹⁶ Among the lower classes of people very great care is taken when a goat, a sheep or fowl is being chosen for sacrifice to goddesses to see that the animal is free from defective limbs. Even now when an animal sacrifice is offered to the lower goddesses, or presiding deities over cholera, small-pox and other epidemics, votaries and worshippers are very careful to obtain a sound animal or fowl.

MISCELLANEA.

THE JOG OR GERSAPPE FALLS.

THE Jôg Falls on the Sharâvati river,¹ which for about eight miles forms the boundary between Mysore and the North Kanara District of the Bombay Presidency, are best known to Europeans as the Gêrsappe Falls, though they are eight miles farther up the river than that old village, and about thirty miles from Honâvar on the coast.

In the south of India there are not a few waterfalls of considerable height and volume. The falls of the Ghatprabhâ, near Gôkâk in the Belgaum District, for example, are 170 feet high, horse-shoe shaped, and with a flood-breadth at the crest of 580 feet, discharging in November after the rains an average of nineteen tons of water per second.

But the Jôg on the Sharâvati is by far the grandest, pouring a large volume of water over a vertical cliff with a sheer drop of 830 feet in height, and extending, even in the dry season, to about 720 yards across, whilst in the monsoon the flood is about doubled, rolling over the precipice at a depth of eight feet into a pool some 130 feet deep. In August 1844 Captain Newbold estimated the fall of water at 43,000 cubic feet per second. In November and later the sight of this mighty cataract is still magnificent; while during the rains the huge chasm is filled with the clouds of spray and mist which hang over the cliff. It is divided by rocks into four separate channels. The Râja or Grand Fall is that nearest the right or Kanara bank of the river, and by itself is a fine fall sweeping down in a smooth unbroken volume till lost in clouds of spray. A good way to the left is the second fall, named the Roarer from the noise it makes: it is within the curve on the north-end of the cliff, and falls into a basin whence it rushes down a deep channel and leaps out to join the Râja fall and the joint streams dash down a rugged gorge upon a great rock. The Rocket is outside the north curve and is of great beauty, and falling upon a projecting rock and darting out thence forms a rocket-like curve of 700 feet, throwing off sparkling jets of spray. To the left of this is the fourth cascade styled LaDame Blanche, which

glides gracefully over the precipice in a sheet of foam and spreads out over the face of the rock down to the pool like folds of silver gauze.²

When visiting these falls in March 1880, I found the following lines in the visitors' book at the Kodkani Travellers' Bungalow, close to the falls, which I got copied out: they may be of interest to some readers: the author of them, Mr Gordon Forbes, was a Madras Civilian, and seems to have been at one time Head Assistant in South Kanara.

J. BURGESS.

GERSAPPE FALLS.

Unnamed yet ancient river! Since the flood
Your tribute—gathered from a thousand rills—
Increasing journeys to the Western main,
Anon, as now in summer heats, waxed low,
Winning slow way amongst the wave-worn rocks;
Anon, ere many moons, above their crests
Rolling triumphant, an all-conquering flood.
Thy varied scenes are like a changeful life:
Turmoil and rest: now harassed and now still.
Thou hast deep reaches where thy waters rest
Calm as a healthful sleep; there drink at noon
The wild herds of the woods; there with deep
shade

Primeval forests curtain thy repose.
Then on with gentle flow and rippling sound—
Dimpled as mirth and musical as joy!
On, lured to swiftmess, or provoked to strife
By rough obstruction or inviting slope.—
On, still unconscious to the awful brink,
Where the wild plunge bath made thee glorious.
Mortal! where wast thou when the hand of God
Quarried the chasms in the living rock,
And rent the cliff to give the torrent way?
How pigmy on the brink thy stature shows,
Topping a rampart of a thousand feet!
Bend o'er the cliff when the uplifting clouds
Reveal the terrors of the deep abyss,
Where the blue pigeon circles at mid height,
And in the spray the darting swallow bathes;
Then, with firm foot and brain undimied, hurl
A fragment from the precipice, and mark—
With fearful sympathy—its long, long fall!
It dwindles to a speck, yet still descends,
Descends and vanishes ere yet the eye

¹ Kanarese *jôgu*, 'a waterfall.'

² Newbold in *Jour. As. Beng.*, Vol. XIV, pp. 416-421; *Bombay Gazetteer, Kanara*, Vol. XV, pt. ii, pp. 284-288; *Bico, Gazetteer of Mysore and Coorg*, Vol. II, pp. 387-391; *Murray's Handbook of India* etc., 5th Ed., pp. 384-5; *Imperial Gazetteer of India*, Vol. XII., p. 210.

Discerns the signal of its distant splash.
Grudge not the toil to track yon rugged stair,*
Down where huge fragments strew the torrent
bed.
Look up and scan the towering precipice.
Sat ever beauty on such awful front?
Was e'er dread grief so girt with loveliness?
How goodly are thy robes, thou foam-clad
queen.*

What hues of heaven are woven in thy skirt;
Thy misty veil, how gracefully it falls—
Forever falls and yet unveils thee not!
Down the black rock in many a show'ry jet,
Like arrowy meteors on the midnight sky,
Prone shoot the parted waters. And lo where
With angry roar athwart the precipices
In mighty furrows rushes to the plunge†
A headlong torrent. But majestic most‡
Thy stately fall, unbroken to the base,
Fair column of white water meekly shrined?
In the dim grandeur of thy gloomy chasm,

Imperishable waters! To the place
From whence ye came incessant ye return,
Dissolve, condense and constant reappear;
A river now, and now a restless wave,
Aloft a heaven-obscuring canopy,
A thunder cloud alighting in soft rain,
Or spilt in torrents on the streaming earth,
Again to gather, and perchance again
Shoot from yon heights a sounding cataract.

GORDON FORBES.

THE AGE OF SRIHARSHA.

IN connection with Mr. D. R. Bhandarkar's note appended to my note on "The age of Sriharsha" ante, p. 83, I have to offer the following observations:—

(a) Rājasekhara's *Prabandhāvala* was composed more than a century and a half after the reign of the Gāhaḍavāla king Jayachandra (A.D. 1176-1193) in A. D. 1348 (Śivadattasarma's introduction to *Neishadhīya-charita*, p. 3). The story of the composition and publication of the

Neishadhīya as told by Rājasekhara has very little historical basis. Of course the names of some historical personages find place in the story. But even here the author is not correct. He names the patron of Sriharsha as Jayantachandra and not Jayachandra and makes him the son and not the grandson of Govindachandra, king of Vārāṇasi; so Rājasekhara cannot be accepted as a very reliable authority on Gāhaḍavāla history, and it is not safe to accept his testimony concerning the contemporaneity of Jayachandra and Sriharsha as decisive without corroborative contemporary evidence. Rājasekhara may as well have connected a poet of an earlier age with Jayachandra as Mera-tunga has connected Bāṇa, Māgha, and the dramatist Rājasekhara with Bhoja Paramāra in his *Prabandhachintamani*.

(b) As for *Argava-varṇana* we know of no other *charitā* which is called *varṇana*, and so it is difficult to accept *Argava-varṇana* as a *charitā* of the Chāhamāna king Arnorāja.

(c) The Ghhinda chief (of Gayā) mentioned in the Gayā inscription of Purushottamadeva, who was a tributary of Aśokavalla, and dated in the year 1813 after Buddha's *Nirveda*, was not a contemporary of Jayachandra, but flourished a century after Jayachandra's accession. The date of this inscription is usually taken as corresponding to Wednesday, 28th October, A.D. 1176, with 638 B. C. as the initial year of the era of Buddha's *Nirveda*. As this is the only instance of the use of this era in India, it cannot be considered as of Indian origin, but must have been imported from outside. It has been proved that the era of Buddha's *Nirveda* starting from 544 B. C. took its rise in Ceylon in the middle of the eleventh century and was thence carried to Burma (Fleet's Contributions to J. R. A. S. of 1909, 1911 and 1912; Geiger's Introduction to the *Mahāvastu*, London, 1912, p. 29). From a Burmese inscription at Bodh-Gayā we learn that Burmese monks repaired a *chaitya* at Bodh-Gayā three times, and that the last repair works were

* The descent on the south side of the fall down to the pool at the bottom.

† The section of the fall called La Dame Blanche,—the fall on the south or Mysore side of the river.

‡ The fall known as 'The Rocket,'—to the north or right of La Dame Blanche.

* 'The Roarer,' falls into a basin and thence leaps towards the Rāja fall and joins it.

* 'The Rāja,'—also called the Horse-shoe fall, the Main fall and the Great fall,—is the large fall on the north or Kanara side of the Sharavati river.

begun in January 1295 A. D., and completed in November 1298 A. D. (*Ep. Ind.* vol. XI., pp. 119-120). The era of Buddha's *Nirāṇa* was, therefore, probably imported from Burma into India in the thirteenth century, and according to the Ceylonese, Burmese and Siamese reckoning the year 1813 after Buddha's *Nirāṇa* corresponds to A. D. 1270. We arrive at similar conclusions regarding the age of Aśokavalla, and, therefore, of the Chhinda chief of Gayā, from two other Gayā inscriptions. The first of these two inscriptions is dated in the year 51 of "*Śrīmat-Lakṣmaṇasena=ādīta rājya*," "the year 51 after the end of Lakṣmaṇasena's reign." (Kielhorn's *Northern List*, No. 576), and the second in the year 74 of the same era (*Ibid.*, No. 577). Assuming that Lakṣmaṇasena ascended the throne in A. D. 1119, the initial epoch of the Lakṣmaṇa Śarvāt, Kielhorn gave A. D. 1171 and 1194 as the equivalents of these dates. But in some copies of *Dānaśāgara* by Ballālasena, father of Lakṣmaṇasena, Śaka 1091=A. D. 1169 is given as the date of the composition of the work (*J. A. S. B.*, 1896, Part I, p. 23; Eggeling's *Catalogue of India Office Mss.*, p. 545), and in one copy of *Adbhutaśāgara* by Ballālasena it is said that the work was begun in Śaka 1090 = A. D. 1168 (Bhandarkar's *Report*, 1887-88 to 1890-91, p. lxxxv). Giving the date of composition in Śaka era was the usual practice with the Bengali authors of those days. Śrīdhara, the author of *Nyāyakundali*, a native of southern Rājā in

Bengal, gives Śaka 913 = A. D. 991 as the date of composition (Bühler's *Kashmir Report*, p. cxliv; *Vishanagram Sanskrit Series*, No. 6, p. 331). Śrīdharaḍāsa, whose father was a friend of Lakṣmaṇasena, compiled his *Sadukti-karṇāmrīta* in Śaka 1127=A. D. 1205. Kielhorn, in his synchronistic table for Northern India appended to *Ep. Ind.*, Vol. VIII, accepts the date of the composition of *Dānaśāgara* as a landmark in the Sena chronology and places the reign of Lakṣmaṇasena in the fourth quarter of the twelfth century. But in the list of dated inscriptions of Northern India prefixed to the table he does not make corresponding changes in the dates of the Gayā inscriptions of Aśokavalla. Taking A. D. 1200 as the approximate date of the end of the reign of Lakṣmaṇasena, the record of 51 should be assigned to A. D. 1251, and that of 74 to A. D. 1274. Thus the dates of Aśokavalla's inscriptions dated in *Lakṣmaṇasena-ādīta-rājya* may be reconciled to his third inscription dated in the year 1813 after Buddha's *Nirāṇa* in which a Chhinda chief of Gayā is referred to.

(d) Mr. Bhandarkar admits, "It is difficult to determine who was the hero of his *Navasāhasāṅka-charita*." This difficulty disappears if we reject the tales told by Rājasekhara and identify the hero of Briharsha's *Navasāhasāṅka-charita* with Bindhurāja Navasāhasāṅka of the Paramāra dynasty, the patron of Padmagupta-Parimala and the hero of his *Navasāhasāṅka-charita*.

RAMA PRASAD CHANDA.

BOOK-NOTICE.

PAVIT HEMECAR *Dis Jivati*. *Prakṛtandaryopadeśa* (in Gujarātī).—Printed at the Dharmābhyudaya Press, Benares, 1911.—Pages 148, 28.—Price 12 annas.

To be fully appreciated, the above book should be considered in connection with the object at which it aims, namely, smoothing the way of learning Prakṛit to Indian students, by putting Hemacandra's aphoristic rules into an easy and readable form. As regards this end, the author—a scholar in the Śrī Yaśovijay Banāras Sanskrit Pāthāśālā—has no doubt reached it, and has fairly succeeded in giving a

co-ordinated and lucid exposition of the whole Prakṛit morphology and of the most important phonetical rules and *śloka*s in the *Haimavyākaraṇa*. It is an original reconstruction of the latter work, not a mere translation, and its most pleasant feature is the division of the matter into lessons—33 in all, which can be successively studied, one after another, in the easiest way. Each lesson generally contains, besides paradigms and grammatical rules, lists of words to be learnt by heart, and

very useful exercises, consisting of short Prakrit sentences to be translated into Gujarati, and Gujarati sentences to be translated into Prakrit. The practical value of the book is further increased by a complete index at the end of all the Prakrit words occurring in it, each word being explained in Gujarati. We have therefore in this work the substance of an ancient Indian *vyākaraṇa*,—the most authoritative one in the present case,—recast into a modern form, in accordance with much the same practical principles as any European grammar of to-day; and I do not hesitate to recommend it strongly to all Indian students, who wish to learn Prakrit from the rules set down by Hemacandra.

Another important feature of the book, which will not be approved by all, however, is the total banishment of Sanskrit from it. Here Papḍit Bahecar Dās Jivraj seems to have gone either on the assumption that there might be students of Prakrit, who are not acquainted with Sanskrit, or, what is practically the same thing, that the latter language is not necessary for the explanation of the former. I need hardly show that this is not the real situation. It is clear that reference to the Sanskrit is absolutely indispensable not only in describing Prakrit phonetics, but also Prakrit morphology. There are many irregular Prakrit forms, like *secca* (<Skt. *śruteś*), *pappa* (<Skt. *prāpṣa*), *bhaṇṇai* (<Skt. *bhaṇṇate*), *moccham* (<Skt. *mokṣyam*), etc., which could never be understood by a student, who is unacquainted with Sanskrit. It is probably on the same assumption that Papḍit Bahecar Dās Jivraj has given to phonetics but little importance in his Grammar, and has contented himself with a short description of the principal phonetical changes, added at the end of the book as a kind of supplement. Now, this is just the reverse of the rational proceeding already followed by Hemacandra, and in this case one must confess that the innovation is not an improvement. I would therefore advise the author to take Sanskrit more into consideration in a second edition of his book and to add in brackets all Sanskrit forms, which might be of help in understanding any Prakrit word. Similarly, I would suggest that, in giving the Gujarati equivalents of Prakrit words, that he employ

śaṣmas of the same origin as the latter, whenever it is possible; e. g., *putra* instead of *dikaro* as an equivalent of *putta*, *aspara* instead of *śahar* as an equivalent of *aspara*, etc. This would, in many cases, greatly facilitate for students, the work of learning Prakrit words by heart.

The language, which Papḍit Bahecar Dās Jivraj teaches in his *Prākṛtamārgopadeśikā*, is naturally the same as that described by Hemacandra in the three first, and also in half the fourth, *pāda* of the eighth *śāhyā* of his *vyākaraṇa*, namely the Māhārāṣṭri, mixed with some of the peculiarities of the Jaina Māhārāṣṭri and of the Ardhamāgadhī. Amongst the characteristics of the two latter dialects, we may reckon the *yaśrafi* and the dentalisation of initial *ṃ* and medial *ṃs*, which Hemacandra and most Jain writers often transfer not only to the Māhārāṣṭri, but even to other Prakrit dialects and to the Apabhraṃṣa. The greater part of the book is devoted to a description of the morphology, and it contains the whole substance of the third *pāda* in the *Haimavyākaraṇa*, each *sūtra* being expanded into one or more very clear rules, and the succession of the various subjects wholly rearranged in the most convenient way. *Adetas*, indeclinables etc., are occasionally interspersed.

Within the above limits the book is quite complete and, if there are any deficiencies in it, these generally are not to be imputed to Papḍit Bahecar Dās Jivraj, but to Hemacandra himself. Only I would venture to remark that, since the *Prākṛtamārgopadeśikā* is practically intended for training students to understand the Prakrit of Jain canonical and extra-canonical works, i. e., the Ardhamāgadhī and the Jaina Māhārāṣṭri, its author would have done well to complete Hemacandra's description of the language by the addition of such forms as are peculiar to the Prakrit used by the Jains, and are not to be found in the Māhārāṣṭri, like the *-e* ending of the nom. sing., and also the *-ā* ending of the nom. plur., the *-ā* termination of the dative, the *-ai*, *-māi* terminations of the locative, the accusative form *viyāṇam* from the base *vājan*, and the *-iṃsu* plural termination of the aorist, etc.

THE ADMINISTRATIVE VALUE OF ANTHROPOLOGY.¹

BY SIR RICHARD C. TEMPLE, BART., C.LE.

THE title of the body of which those present at this meeting from a section is, as all my hearers will know, the British Association for the Advancement of Science, and it seems to me therefore that the primary duty of a sectional President is to do what in him lies, for the time being, to forward the work of his section. This may be done in more than one way: by a survey of the work done up to date and an appreciation of its existing position and future prospects, by an address directly forwarding it in some particular point or aspect, by considering its applicability to what is called the practical side of human life. The choice of method seems to me to depend on the circumstances of each meeting, and I am about to choose the last of those above mentioned, and to confine my address to a consideration of the administrative value of anthropology because the locality in which we are met together and the spirit of the present moment seem to indicate that I shall best serve the interests of the anthropological section of the British Association by a dissertation on the importance of this particular science to those who are or may hereafter be called upon to administer the public affairs of the lands in which they may reside.

I have to approach the practical aspect of the general subject of anthropology under the difficulty of finding myself once more riding an old hobby, and being consequently confronted with views and remarks already expressed in much detail. But I am not greatly disturbed by this fact, as experience teaches that the most effective way of impressing ideas, in which one believes, on one's fellow man is to miss no opportunity of putting them forward, even at the risk of repeating what may not yet have been forgotten. And as I am convinced that the teachings of anthropologists are of practical value to those engaged in guiding the administration of their own or another country, I am prepared to take that risk.

Anthropology is, of course, in its baldest sense the study of mankind in all its possible ramifications, a subject far too wide for any one science to cover, and therefore the real point for consideration on such an occasion as this is not so much what the students of mankind and its environments might study if they chose, but what the scope of their studies now actually is, and whether it is tending. I propose, therefore, to discuss the subject in this limited sense.

What then is the anthropology of to-day, that claims to be of practical value to the administrator? In what directions has it developed?

Perhaps the best answer to these questions is to be procured from our own volume of 'Notes and Queries on Anthropology,' a volume published under the arrangements of the Royal Anthropological Institute for the British Association. This volume of 'Notes and Queries' has been before the public for about forty years, and is now in the fourth edition, which shows a great advance on its predecessors and conforms to the stage of development to which the science has reached up to the present time.

The object of the 'Notes and Queries' is stated to be 'to promote accurate anthropological observation on the part of travellers (including all local observers) and to enable those who are not anthropologists themselves to supply information which is wanted for the scientific study of anthropology at home.' So, in the heads under which the subject is considered in this book, we have exhibited to us the entire scope of the science as it now exists. These heads are (1) Physical Anthropology, (2) Technology, (3) Sociology, (4) Arts and Sciences.

¹ Presidential Address delivered to the Anthropological Section of the British Association for the Advancement of Science, held at Birmingham, 1913.

It is usual, however, nowadays to divide the subject into two main divisions—physical and cultural anthropology.

Physical Anthropology aims at obtaining 'as exact a record as possible of the structure and functions of the human body, with a view to determining how far these are dependent on inherited and racial factors, and how far they vary with environment.' This record is based on two separate classes of physical observation: firstly on descriptive characters, such as types of hair, colour of the eyes and skin, and so on, and actual measurement; and secondly on attitudes, movements, and customary actions. By the combined study of observations on these points physical heredity is ascertained, and a fair attribution of the race or races to which individuals or groups belong can be arrived at.

But anthropology, as now studied, goes very much further than inquiry into the physical structure of the human races. Man, 'unlike other animals, habitually reinforces and enhances his natural qualities and force by artificial means.' He does, or gets done for him, all sorts of things to his body to improve its capacities or appearance, or to protect it. He thus supplies himself with sanitary appliances and surroundings, with bodily ornamentation and ornaments, with protective clothing, with habitations and furniture, with protection against climate and enemies, with works for the supply of water and fire, with food and drink, drugs and medicine. And for these purposes he hunts, fishes, domesticates animals, and tills the soil, and provides himself with implements for all these, and also for defence and offence, and for the transport of goods, involving working in wood, earth, stones, bones, shells, metals and other hard materials, and in leather, strings, nets, basketry, matting and weaving, leading him to what are known as textile industries. Some of this work has brought him to mine and quarry, and to employ mechanical aids in the shape of machinery, however rude and simple. The transport of himself and his belongings by land and water has led him to a separate set of industries and habits: to the use of paths, roads, bridges, and halting places, of trailers, sledges, and wheeled vehicles; to the use of rafts, floats, canoes, coracles, boats, and ships, and the means of propelling them, poles, paddles, oars, sails, and rigging. The whole of these subjects is grouped by anthropologists under the term Technology, which thus becomes a very wide subject, covering all the means by which a people supplies itself with the necessities of its mode of livelihood.

In order to successfully carry on what may be termed the necessary industries or even to be in a position to cope with them, bodies of men have to act in concert, and this forces mankind to be gregarious, a condition of life that involves the creation of social relations. To understand, therefore, any group of mankind, it is essential to study Sociology side by side with Technology. The subjects for inquiry here are the observances at crucial points in the life history of the individual—birth, puberty, marriage, death, daily life, nomenclature, and so on; the social organisation and the relationship of individuals. On these follow the economics of the social group, pastoral, agricultural, industrial, and commercial, together with conceptions as to property and inheritance (including slavery), as to government, law and order, politics and morals; and finally the ideas as to war and the external relations between communities.

We are still, however, very far from being able to understand in all their fullness of development even the crudest of human communities, without a further inquiry into the products of their purely mental activities, which in the 'Notes and Queries' are grouped under the term 'Arts and Sciences.' Under this head are to be examined, in the first place the expression of the emotions to the eye by physical movements and conditions, and then by gestures, signs and signals, before we come to language, which is primarily expressed by the

voice to the ear, and secondarily to the eye in a more elaborate form by the graphic arts—pictures, marks and writing. Man further tries to express his emotions by what are known as the Fine Arts; that is by modifying the material articles which he contrives for his livelihood in a manner that makes them represent to him something beyond their economic use—makes them pleasant, representative or symbolical—leading him on to draw, paint, enamel, engrave, carve and mould. In purely mental efforts this striving to satisfy the artistic or æsthetic sense takes the form of stories, proverbs, riddles, songs, and music. Dancing, drama, games, tricks and amusements are other manifestations of the same effort, combining in these cases the movements of the body with those of the mind in expressing the emotions.

The mental process necessary for the expression of his emotions have induced man to extend his powers of mind in directions now included in the term 'Abstract Reasoning.' This has led him to express the results of his reasoning by such terms as reckoning and measurement, and to fix standards for comparison in such immaterial but all essential matters as enumeration, distance, surface, capacity, weight, time, value and exchange. These last enable him to reach the idea of money, which is the measurement of value by means of tokens, and represents perhaps the highest economic development of the reasoning powers common to nearly all mankind.

The mental capacities of man have so far been considered only in relation to the expression of the emotions and of the results of abstract reasoning; but they have served him also to develop other results and expressions equally important, which have arisen out of observation of his surroundings, and have given birth to the Natural Sciences: astronomy, meteorology, geography, topography and natural history. And further they have enabled him to memorise all these things by means of records, which in their highest form have brought about what is known to all of us as history, the bugbear of impulsive and shallow thinkers, but the veryback-bone of all solid opinion.

The last and most complex development of the mental processes, dependent upon all the others according to the degree to which they themselves have been developed in any given variety of mankind, is, and has always been, present in every race or group on record from the remotest to the most recent time in some form or other and in a high degree. Groups of men observe the phenomena exhibited by themselves or their environment, and account for them according to their mental capacity as modified by their heredity. Man's bare abstract reasoning, following on his observation of such phenomena, is his philosophy, but his inherited emotions influence his reasoning to an almost controlling extent and induce his religion, which is thus his philosophy or explanation of natural phenomena as effected by his hereditary emotions, producing that most wonderful of all human phenomena, his belief. In the conditions, belief, faith, and religion must and do vary with race, period and environment.

Consequent on the belief, present or past of any given variety of mankind, there follow religious practices (customs as they are usually called) based thereon, and described commonly in terms that are familiar to all, but are nevertheless by no means even yet clearly defined: theology, heathenism, fetishism, animism, totemism, magic, superstition, with soul, ghost, and spirit, and so on, as regards mental concepts; worship, ritual, prayer, sanctity, sacrifice, taboo, etc., as regards custom and practice.

Thus have the anthropologists, as I understand them, shown that they desire to answer the question as to what their science is, and to explain the main points in the subject of which they strive to obtain and impart accurate knowledge based on scientific inquiry: that is, on an

inquiry methodically conducted on lines which experience has shown them will lead to the minimum of error in observation and record.

I trust I have been clear in my explanation of the anthropologists' case, though in the time at my disposal I have been unable to do more than indicate the subjects they study, and have been obliged to exercise restraint and to employ condensation of statement to the utmost extent that even a long experience in exposition enables one to achieve. Briefly, the science of anthropology aims at such a presentation and explanation of the physical and mental facts about any given species or even group of mankind as may correctly instruct those to whom the acquisition of such knowledge may be of use. In this instance, as in the case of the other sciences, the man of science endeavours to acquire and pass on abstract knowledge, which the man of affairs can confidently apply in the daily business of practical life.

It will have been observed that an accurate presentation of the physical and mental characteristics of any species of mankind which it is desired to study is wholly dependent on accurate inquiry and report. Let no one suppose that such inquiry is a matter of instinct or intuition, or that it can be usefully conducted empirically or without due reference to the experiences of others; in other words without sufficient preliminary study. So likely indeed are the uneducated in such matters to observe and record facts about human beings inaccurately, or even wrongly, that about a fourth part of the 'Notes and Queries' is taken up with showing the inquirer how to proceed, and in exposing the pitfalls into which he may unconsciously fall. The mainspring of error in anthropological observation is that the inquirer is himself the product of heredity and environment. This induces him to read himself, his own unconscious prejudices and inherited outlook on life, into the statements made to him by those who view life from perhaps a totally different and incompatible standpoint. To the extent that the inquirer does this, to that extent are his observations and report likely to be inaccurate and misleading. To avoid error in this respect, previous training and study are essential, and so the 'Notes and Queries on Anthropology,' a guide compiled in co-operation by persons long familiar with the subject, is as strong and explicit on the point of how to inquire as on that of what to inquire about.

Let me explain that these statements are not intended to be taken as made *ex cathedra*, but rather as the outcome of actual experience of mistakes made in the past. Time does not permit me to go far into this point, and I must limit myself to the subject of Sociology for my illustration. If a man undertakes to inquire into the social life of a people or tribe as a subject apart, he is committing an error, and his report will almost certainly be misleading. Such an investigator will find that religion and technology are inextricably mixed up with the sociology of any given tribe, that religion intervenes at every point not only of sociology but also of language and technology. In fact, just as in the case of all other scientific research, the phenomena observable by the anthropologist are not the result of development along any single line alone, but of a progression in a main general direction, as influenced, and it may be even deflected, by contact and environment.

If again the inquirer neglects the simple but essential practice of taking notes, not only fully, but also immediately or as nearly so as practicable, he will find that his memory of facts, even after a short time, has become vague, inexact, and incomplete, which means that reports made from memory are more likely to be useless than to be of any scientific value. If voluntary information or indirect and accidental corroboration are ignored, if questions are asked and answers accepted without discretion; if exceptions are mistaken for rules, then the records of an inquiry may well mislead and thus become worse than useless. If leading or direct

questions are put without due caution, and if the answers are recorded without reference to the natives' and not the enquirer's mode of classifying things, crucial errors may easily arise. Thus, in many parts of the world, the term 'mother' includes all female relatives of the past or passing generation, and the term 'brother' the entire brotherhood. Such expressions as 'brother' and 'sister' may and do constantly connote relationships which are not recognised at all amongst us. The word 'marriage' may include 'irrevocable betrothal,' and so on; and it is very easy to fall into the trap of the mistranslation of terms of essential import, especially in the use of words expressing religious conceptions. The conception of godhead has for so long been our inheritance that it may be classed almost as instinctive. It is nevertheless still foreign to the instincts of a large portion of mankind.

If also, when working among the uncultured, the inquirer attempts to ascertain abstract ideas, except through concrete instances, he will not succeed in his purpose for want of representative terms. And lastly, if he fails to project himself sufficiently into the minds of the subjects of inquiry, or to respect their prejudices, or to regard seriously what they hold to be sacred, or to keep his countenance while practices are being described which to him may be disgusting or ridiculous—if indeed he fails in any way in communicating to his informants, who are often super-sensitively suspicious in such matters, the fact that his sympathy is not feigned—he will also fail in obtaining the anthropological knowledge he is seeking. In the words of the 'Notes and Queries' on this point, 'Nothing is easier than to do anthropological work of a certain sort, but to get to the bottom of native customs and modes of thought, and to record the results of inquiry in such a manner that they carry conviction, is work which can be only carried out properly by careful attention.'

The foregoing considerations explain the scope of our studies and the requirements of the preliminary inquiries necessary to give those studies value. The further question is the use to which the results can be put. The point that at once arises here for the immediate purpose is that of the conditions under which the British Empire is administered. We are here met together to talk scientifically, that is, as precisely as we can: and so it is necessary to give a definition to the expression 'Imperial Administration,' especially as it is constantly used for the government of an empire, whereas in reality it is the government that directs the administration. In this address I use the term 'administration' as the disinterested management of the details of public affairs. This excludes 'politics' from our purview, defining that term as the conduct of the government of a country according to the opinions or in the interests of a particular group or party.

Now in this matter of administration the position of the inhabitants of the British Isles is unique. It falls to their lot to govern, directly or indirectly, the lives of members of nearly every variety of the human race. Themselves Europeans by descent and intimate connection, they have a large direct interest in every other general geographical division of the world and its inhabitants. It is worth while to pause here for a moment to think, and to try and realise, however dimly, something of the task before the people of this country in the government and control of what are known as the subject races.

For this purpose it is necessary to throw our glance over the physical extent of the British Empire. In the first place, there are the ten self-governing components of the Dominion of Canada and that of Newfoundland in North America, the six Colonial States in the Commonwealth of Australia, with the Dominion of New Zealand in Australasia, and the four divisions of the Union of South Africa. All these may be looked upon as indirectly administered portions of the British Empire. Then there is the mediatised government of Egypt,

with its appanage, the directly British administered Sudan, which alone covers about a million square miles of territory in thirteen provinces, in Northern Africa. These two areas occupy, as it were, a position between the self-governing and the directly-governed areas. Of these, there are in Europe, Malta and Gibraltar, Cyprus being officially included in Asia. In Asia itself is the mighty Indian Empire, which includes Aden and the Arabian Coast on the West and Burma on the East, and many islands in the intervening seas, with its fifteen provinces and some twenty categories of Native States 'in subordinate alliance,' that is, under general Imperial control. To these are added Ceylon, the Straits Settlements, and the Malay States, federated or other, North Borneo and Sarawak, and in the China Seas Hongkong and Wei-hai-wei. In South Africa we find Basutoland, Bechuanaland, and Rhodesia; in British West Africa, Gambia, the Gold Coast, Sierra Leone, and Nigeria; in Eastern and Central Africa, Somaliland, the East Africa Protectorate, Uganda, Zanzibar, and Nyassaland; while attached to Africa are the Mauritius, Seychelles, Ascension and St. Helena. In Central and South America are Honduras and British Guiana, and attached to that continent the Falkland Islands, and also Bermuda and the six colonies of British West Indies. In the Pacific Ocean are Fiji, Papua and many of the Pacific Islands.

I am afraid that once more during the course of this exposition I have been obliged to resort to a concentration of statement that is almost bewildering. But let that be. If one is to grapple successfully with a large and complex subject, it is necessary to try and keep before the mind, so far as possible, not only its magnitude, but the extent of its complexity. This is the reason for bringing before you, however briefly and generally, the main geographical details of the British Empire. The first point to realise on such a survey is that the mere extent of such an Empire makes the subject of its administration an immensely important one for the British people.

The next point for consideration and realisation is that an empire, situated in so many widely separated parts of the world, must contain within its boundaries groups of every variety of mankind, in such numerical strength as to render it necessary to control them as individual entities. They do not consist of small bodies lost in a general population, and therefore negligible from the administrator's point of view, but of whole races and tribes or of large detachments thereof.

These tribes of mankind profess every variety of religion known. They are Christians, Jews, Mahomedans, Hindus, Buddhists, Jains, Animists and to use a very modern expression, Animatists, adherents of main religions followed by an immense variety of sects, governed, however loosely, by every species of philosophy that is or has been in fashion among groups of mankind, and current in every stage of development, from the simplest and most primitive to the most historical and complex. One has to bear in mind that we have within our borders the Andamanese, the Papuan, and the Polynesian, as well as the highly civilised Hindu and Chinese, and that not one of these, nor indeed of many other peoples, has any tradition of philosophy or religion in common with our own; their very instincts of faith and belief following other lines than ours, the prejudices with which their minds are saturated being altogether alien to those with which we ourselves are deeply imbued.

The subjects of the British King-Emperor speak between them most of the languages of the world, and certainly every structural variety of human speech has its example somewhere in the British Empire. A number of these languages is still only in the process of becoming understood by our officials and other residents among their speakers, and let there be no mistake as to the magnitude of the question involved in the point of language alone in British

Imperial regions. A man may be what is called a linguist. He may have a working knowledge of the main European languages and of the great Oriental tongues, Arabic, Persian, and Hindustani, which will carry him very far indeed among the people—in a sense, in fact, from London to Calcutta—and then, without leaving that compact portion of the British Possessions known as the Indian Empire, with all its immense variety of often incompatible subordinate languages and dialects, he has only to step across the border into Burma and the further East to find himself in a totally different atmosphere of speech, where not one of the sounds, not one of the forms, not one of the methods, with which he has become familiarised is of any service to him whatever. The same observation will again be forced on him if he transfers himself thence to Southern Africa or to the Pacific Ocean. Let him wander amongst the North American Indians, and he will find the linguistic climate once more altogether changed.

Greater Britain may be said to exhibit all the many varieties of internal social relations that have been set up by tribes and groups of mankind—all the different forms of family and general social organisation, of reckoning kinship, of inheritance and control of the possession of property, of dealing with the birth of children and their education and training, physical, mental, moral, and professional, in many cases by methods entirely foreign to British ideas and habits. For instance, infanticide as a custom has many different sources of origin.

Our fellow subjects of the King follow, somewhere or other, all the different notions and habits that have been formed by mankind as to the relations between the sexes, both permanent and temporary, as to marriage and to what have been aptly termed supplementary unions. And finally, their methods of dealing with death and bringing it about, of disposing of the dead and worshipping them, give expression to ideas, which it requires study for an inhabitant of Great Britain to appreciate or understand. I may quote here as an example, that of all the forms of human head-hunting and other ceremonial murder that have come within my cognisance, either as an administrator or investigator, not one has originated in callousness or cruelty of character. Indeed, from the point of view of the perpetrators, they are invariably resorted to for the temporal or spiritual benefit of themselves or their tribe. In making this remark, I must not be understood as proposing that they should not be put down, wherever that is practicable. I am merely trying now to give an anthropological explanation of human phenomena.

In very many parts of the British Empire, the routine of daily life and the notions that govern it often find no counterparts of any kind in those of the British Isles, in such matters as personal habits and etiquette on occasions of social intercourse. And yet, perhaps, nothing estranges the administrator from his people more than mistakes on these points. It is small matters—such as the mode of salutation, forms of address and politeness, as rules of precedence, hospitality, and decency, as recognition of superstitions, however apparently unreasonable—which largely govern social relations, which no stranger can afford to ignore, and which at the same time cannot be ascertained and observed correctly without due study.

The considerations so far urged to-day have carried us through the points of the nature and scope of the science of anthropology, the mental equipment necessary for the useful pursuit of it, the methods by which it can be successfully studied, the extent and nature of the British Empire, the kind of knowledge of the alien populations within its boundaries required by persons of British origin who would administer the empire with benefit to the people dwelling in it, and the importance to such persons of acquiring that knowledge.

I now turn to the present situation as to this last point and its possible improvement, though in doing so I have to cover ground that some of those present may think I have already

trodden bare. The main proposition here is simple enough. The Empire is governed from the British Isles, and therefore year by year a large number of young men is sent out to its various component parts, and to them must inevitably be entrusted in due course the administrative, commercial, and social control over many alien races. If their relations with the foreign peoples with whom they come in contact are to be successful, they must acquire a working knowledge of the habits, customs, and ideas that govern the conduct of those peoples, and of the conditions in which they pass their lives. All those who succeed find these things out for themselves, and discern that success in administration and commerce is intimately affected by success in social relations, and that that in its turn is dependent on the knowledge they may attain of those with whom they have to deal. They set about learning what they can, but of necessity empirically, trusting to keenness of observation, because such self-tuition is, as it were, a side issue in the immediate and imperative business of their lives. But, as I have already said elsewhere, the man who is obliged to obtain the requisite knowledge empirically, and without any previous training in observation, is heavily handicapped indeed in comparison with him who has already acquired the habit of right observation, and, what is of much more importance, has been put in the way of correctly interpreting his observations in his youth.

To put the proposition in its briefest form: in order to succeed in administration a man must use tact. Tact is the social expression of discernment and insight, qualities born of intuitive anthropological knowledge, and that is what it is necessary to induce in those sent abroad to become eventually the controllers of other kinds of men. What is required, therefore, is that in youth they should have imbibed the anthropological habit, so that as a result of having been taught how to study mankind, they may learn what it is necessary to know of those about them correctly, and in the shortest practicable time. The years of active life now unavoidably wasted in securing this knowledge, often inadequately and incorrectly even in the case of the ablest, can thus be saved, to the incalculable benefit of both the governors and the governed.

The situation has, for some years past, been appreciated by those who have occupied themselves with the science we are assembled here to promote, and several efforts have been made by the Royal Anthropological Institute and the Universities of Oxford, Cambridge, and London, at any rate, to bring the public benefits accruing from the establishment of anthropological schools before the Government and the people of this country.

In 1902 the Royal Anthropological Institute sent a deputation to the Government with a view to the establishment of an official Anthropometric Survey of the United Kingdom, in order to test the foundation for fears, then widely expressed, as to the physical deterioration of the population. In 1909 the Institute sent a second deputation to the present Government, to urge the need for the official training in anthropology of candidates for the Consular Service and of the Indian and Colonial Civil Services. There is happily every reason to hope that the Public Services Commission may act on the recommendations then made. This year (1913) the Institute returned to the charge and approached the Secretary of State for India, with a view to making anthropology an integral feature of the studies of the Oriental Research Institute, to the establishment of which the Government of India had officially proposed to give special attention. The Institute has also lately arranged to deal with all questions of scientific import that may come before the newly constituted Bureau of Ethnology at the Royal Colonial Institute, in the hope with its co-operation of eventually establishing a great *desideratum*—an Imperial Bureau of Ethnology. It has further had in hand a scheme for the systematic and thorough distribution of local correspondents throughout the world.

At Oxford, anthropology as a serious study was recognised by the appointment, in 1884, of a Reader, who was afterwards given the status of a Professor. In 1885, it was admitted as a special subject in the Final Honours School of Natural Science. In 1904, a memorandum was drawn up by those interested in the study at the University, advocating a method of systematic training in it, which resulted in the formation of the Committee of Anthropology in the following year. This Committee has established a series of lectures and examinations for a diploma, which can be taken as part of the degree course, but is open to all officers of the public services as well. By these means a School of Anthropology has been created at Oxford, which has already registered many students, among whom officers engaged in the administration of the British Colonies in Africa and members of the Indian Civil Service have been included. The whole question has been systematically taken up in all its aspects, the instruction, formal and informal, comprising physical anthropology, psychology, geographical distribution, prehistoric archaeology, technology, sociology, and philology.

At Cambridge, in 1893, there was a recognised Lecturer in Physical Anthropology, an informal office now represented by a Lecturer in Physical Anthropology and a Reader in Ethnology, regularly appointed by the University. In 1904, as a result of an expedition to Torres Straits, a Board of Anthropological Studies was formed, and a Diploma in Anthropology instituted, to be granted, not for success in examinations, but in recognition of meritorious personal research. At the same time, in order to help students, among whom were included officials in the African and Indian Civil Services, the Board established lectures on the same subjects as those taught at Oxford. This year, 1913, the University has instituted an Anthropological Tripos for its Degrees on lines similar to the others. The distinguishing feature of the Cambridge system is the prominence given to field work, and this is attracting foreign students of all sorts.

In 1909, joint representations were made by a deputation from the Universities of Oxford and Cambridge to both the India and Colonial Offices, advocating the training of Civil Service candidates and probationers in ethnology and primitive religion.

In 1904, the generosity of a private individual established a Lectureship in Ethnology in connection with the University of London, which has since developed into a Professorship of Ethnology with a Lectureship in Physical Anthropology. In the same year the same benefactor instituted a Chair of Sociology. In 1909 the University established a Board of Anthropology, and the subject is now included in the curricula for the Degrees of the University. In and after 1914, Anthropology will be a branch of the Science Honours Degree. The Degree course of the future covers both physical and cultural anthropology in regard to zoology, palaeontology, physiology, psychology, archaeology, technology, sociology, linguistics and ethnology. There will also be courses in ethnology with special attention to field work for officials and missionaries, and it is interesting to note that students of Egyptology are already taking a course of lectures in ethnology and physical anthropology.

Though the Universities have thus been definite enough in their action where the authority is vested in them, it is needless to say that their representations to Governments have met with varying success, and so far they have not produced much practical result. But it is as well to note here that a precedent for the preliminary anthropological training of probationers in the Colonial Civil Service has been already set up, as the Government of the Sudan has directed that every candidate for its services shall go through a course of anthropology at Oxford or Cambridge. In addition to this, the Sudan Government has given a grant to enable a competent anthropologist from London to run a small scientific survey of the peoples under

its administration. The Assam Government has arranged its ethnographical monographs on the lines of the British Association's 'Notes and Queries' with much benefit to itself, and it is believed that the Burma Government will do likewise.

Speaking in this place to such an audience as that before me, and encouraged by what was already been done elsewhere, I cannot think that I can be mistaken in venturing to recommend the encouragement of the study of anthropology to the University of such a city as Birmingham, which has almost unlimited interests throughout the British Empire. For it should be remembered that anthropological knowledge is as useful to merchants *in partibus* in dealing with aliens as to administrators so situated. Should this suggestion bear fruit, and should it be thought advisable some day to establish a School of Anthropology in Birmingham, I would also venture to point out that there are two requirements preliminary to the successful formation of almost any school of study. These are a library and a museum *ad hoc*. At Oxford there is a well known and well conducted anthropological museum in the Pitt-Rivers Collection, and the Museum of Archaeology and Ethnology at Cambridge contains collections of the greatest service to the anthropologist. Liverpool is also interesting itself in such matters. The Royal Anthropological Institute is forming a special library, and both that Institute and the University of London have the benefit of the splendid collections of the British Museum and of the Horniman Museum readily accessible. The libraries at Oxford and Cambridge are, I need hardly say, of world-wide fame. At all these places of learning, then, these requisites for this department of knowledge are forthcoming.

It were almost superfluous to state why they are requisites. Every student requires, not only competent teachers to guide him in his particular branch of study, but also a library and a museum close at hand, where he can find the information he wants and the illustration of it. Where these exist, thither it will be found that students will flock. Birmingham possesses peculiar facilities for the formation of both, as the city has all over the Empire its commercial representatives, who can collect the required museum specimens on the spot. The financial labours also of those who distribute these men over Greater Britain, and indeed all over the world, produce the means to create the library and the school, and their universal interests provide the incentive for securing for those in their employ the best method of acquiring a knowledge of men that can be turned to useful commercial purpose. Beyond these suggestions I will not pursue this point now, except to express a hope that this discourse may lead to a discussion thereon before this meeting breaks up.

Before I quit my subject I would like to be somewhat insistent, on the fact that, though I have been dwelling so far exclusively on the business side, as it were, of the study of anthropology, it has a personal side as well. I would like to impress once more on the student, as I have often had occasion to do already, that whether he is studying of his own free will or at the behest of circumstances, there is hardly any better hobby in existence than this, or one that can be ridden with greater pleasure. It cannot, of course, be mastered in a day. At first the lessons will be a grind. Then, until they are well learnt, they are irksome, but when fullness of knowledge and maturity of judgment are attained, there is, perhaps, no keener sense of satisfaction which human beings can experience than that which is afforded by this study. Its range is so wide, its phases so very many, the interests involved in it so various, that it cannot fail to pleasantly occupy the leisure hours from youth to full manhood, and to be a solace, in some aspect or other, in advanced life and old age.

The processes of discovery in the course of this study are of such interest in themselves that I should wish to give many instances, but I must confine myself now to one or two. The

students will find on investigation, for instance, that however childish the reasoning of savages may appear to be on abstract subjects, and however silly some of their customs may seem, they are neither childish nor silly in reality. They are almost always the result of 'correct argument-from a false premise'—a mental process not unknown to civilised races. The student will also surely find that savages are not fools where their concrete interests are concerned, as they conceive those interests to be. For example, in commerce, beads do not appeal to savages merely because they are pretty things, except for purposes of adornment. They will only part with articles they value for particular sorts of beads which are to them money, in that they can procure in exchange for them, in their own country, something they much desire. They have no other reason for accepting any kind of bead in payment for goods. On few anthropological points can mistakes be made more readily than on this, and when they are made by merchants, financial disaster can well follow, so that what I have already said elsewhere as to this may bear repetition in part here. Savages in their bargains with civilised man never make one that does not, for reasons of their own, satisfy themselves. Each side, in such a case, views the bargain according to its own interest. On his side, the trader buys something of great value to him, when he has taken it elsewhere, with something of little value to him, which he has brought from elsewhere, and then, and only then, can he make what is to him a magnificent bargain. On the other hand the savage is more than satisfied, because with what he has got from the trader he can procure from among his own people something he very much covets, which the article he parted with could not have procured for him. Both sides profit by the bargain from their respective points of view, and traders cannot, as a matter of fact, take undue advantage of savages, who, as a body, part with products of little or no value to themselves for others of vital importance, though these last may be of little or none to the civilised trader. The more one dives into recorded bargains, the more clearly one sees the truth of this view.

I have always advocated personal inquiry into the native currency and money, even of pre-British days, of the people amongst whom a Britisher's lot is cast, for the reason that the study of the mental processes that lead up to commercial relations, internal and external, the customs concerned with daily buying and selling, take one more deeply into aliens' habits of mind and their outlook on practical life than any other branch of research. The student will find himself involuntarily acquiring a knowledge of the whole life of a people, even of superstitions and local politics, matters that commercial men, as well as administrators, cannot, if they only knew it, ever afford to ignore. The study has also a great intellectual interest, and neither the man of commerce nor the man of affairs should disregard this side of it if he would attain success in every sense of that term.

Just let me give one instance from personal experience. A few years back a number of ingots of tin, in the form of birds and animals and imitations thereof, hollow tokens of tin ingots, together with a number of rough notes taken on the spot, were handed over to me for investigation and report. They came from the Federated Malay States, and were variously said to have been used as toys and as money in some form. A long and careful investigation unearthed the whole story. They turned out to be surviving specimens of an obsolete and forgotten Malay currency. Bit by bit, by researches into travellers' stories and old records, European and vernacular, it was ascertained that some of the specimens were currency and some money, and that they belonged to two separate series. Their relations to each other were ascertained, and also to the currencies of the European and Oriental nations with whom the Malays of the Peninsula had come in contact. The mint profit in some instances, and in other instances the actual profit European governments and mercantile authorities, and even native traders, had made in recorded transactions of the past, was found out. The origin of the British, Dutch, and Portuguese money, evolved for trading with the Malays, was disclosed, and several interesting historical discoveries were made; as, for instance, the explanation of the coins still

remaining in museums and issued in 1510 by the great Portuguese conqueror, Albuquerque, for the then new Malay possessions of his country, and the meaning of the numismatic plates of the great French traveller Tavernier in the next century. Perhaps the most interesting, and anthropologically the most important, discovery was the relation of the ideas that led up to the animal currency of the Malays to similar ideas in India, Central Asia, China, and Europe itself throughout all historical times. One wonders how many people in these isles grasp the fact that our own monetary scale of 960 farthings to the sovereign, and the native Malay scale of 1,280 cash to the dollar, are representatives of one and the same universal scale, with more than probably one and the same origin out of a simple method of counting seeds, peas, beans, shells, or other small natural constant weights. But the point for the present purpose is that not only will the student find that long practice in anthropological inquiry, and the learning resulting therefrom, will enable him to make similar discoveries, but also that the process of discovery is intensely interesting. Such discoveries, too, are of practical value. In this instance they have taught us much of native habits of thought and views of life in newly acquired possessions which no administrator there, mercantile or governmental, can set aside with safety.

I must not dwell too long on this aspect of my subject, and will only add the following remark. If any of my hearers will go to the Pitt-Rivers Museum at Oxford he will find many small collections recording the historical evolution of various common objects. Among them is a series showing the history of the tobacco pipe, commonly known to literary students in this country as the *nargileh* and to Orientalists as the *hukka*. At one end of the series will be found a hollow coconut with an artificial hole in it, and then every step in evolution between that and an elaborate *hukka* with its long, flexible, drawing-tube at the other end. I give this instance, as I contributed the series, and I well remember the eagerness of the hunt in the Indian bazaars and the satisfaction on proving every step in the evolution.

There is one aspect of life where the anthropological instinct would be more than useful, but to which, alas, it cannot be extended in practice. Politics, government, and administration are so interdependent throughout the world that it has always seemed to me to be a pity that the value to himself of following the principles of anthropology cannot be impressed on the average politician of any nationality. I fear it is hopeless to expect it. Were it only possible, the extent of the consequent benefit to mankind is at present beyond human forecast, as then the politician could approach his work without that arrogance of ignorance of his fellow countrymen on all points, except their credulity, that is the bane of the ordinary types of his kind wherever found, with which they have always poisoned and are still poisoning their minds, mistaking the satisfaction of the immediate temporary interests and prejudices of themselves and comrades for the permanent advantage of the whole people, whom, in consequence, they incontinently misgovern, whenever and for so long as their country is so undiscerning as to place them in power.

Permit me, in conclusion, to enforce the main argument of this address by a personal note. It was my fortune to have been partly trained in youth at a University College, where the tendency was to produce men of affairs rather than men of the schools, and only the other day it was my privilege to hear the present master of the College, my own contemporary and fellow-undergraduate, expound the system of training still carried out there. 'In the government of young men,' he said, 'intellect is all very well, but sympathy counts for very much more.' Here we have the root principle of Applied Anthropology. Here we have in a nutshell the full import of its teaching. The sound administration of the affairs of men can only be based on cultured sympathy, that sympathy on sure knowledge, that knowledge on competent study, that study on accurate inquiry, that inquiry on right method, and that method on continuous experience.

CRITICAL NOTES ON KALHANA'S EIGHTH TARANGA.

BY E. HULTZSCH.

THE subjoined list forms the continuation of my "Critical Notes on Kalhana's Seventh Tarāṅga" in Vol. XL. of this Journal (p. 97 ff.). It is concerned with verses 1-1500 of the last Tarāṅga (VIII.) of Kalhana's *Rajatarāṅgiṇī* and registers those readings of my ancient Sāradā MS. (M) which are either preferable to those of Sir Aurel Stein's edition or worth consideration. The abbreviations are the same as before (Vol. XL. p. 97), but the two MSS. P and E were not at hand during the preparation of this list. In M the following verses of the passage VIII, 1-1500 are preserved either in full or partially:—1-24, 733-1369, and 1495-1500, while the leaves containing verses 25-732 and 1370-1494 are lost. It will be observed that, wherever M is available for comparison, it becomes possible to correct some details of the published text. Every student of the eighth Tarāṅga is therefore recommended to consult this list when using Sir Aurel Stein's excellent edition and translation of Kalhana's chronicle.

3. °वमाहो M.
 13. °व्यक्ति M.; read °व्यक्ति.
 14. Read °स्वस्वार्द्रधी: with M.
 17. Read °हिज with D.
 149. Read °बुलया with D.
 175. Read °वानैस्तै with C and D.
 252. Read perhaps °मस्वोजो° (°मुद्रोजो° MSS., °मद्योजो° O).
 296. Read perhaps °प्रावेश with C, D and °पुखा: स्व°.
 368. Read °कुर्वत्या with D.
 375. Read °चक्रिकै: with N.
 490. Read °स्वदुयत.
 501. Read °चक्रिकाम् (°चक्रिकम् C, D, N).
 538. °बडनापुरा° N; cf. my note on VII, 588.
 600. If the reading °स्वनायान्तनयोनिकम् is correct, Kalhana would have offended against Pāṇini, VI, 1, 125.
 610. Read °सान्स्वमान: with D.
 708. Read °पालिका:.
 715. Read °कान्स्वदेव with D.
 733. °खळीवी° M.
 737. °आसन्नभ्रान्त° M. Divide *dsan aśānta°* or *dsan aśānta°*, while Dr. Stein's translation presupposes *dsanna-śānta°*.
 739. Read °योगिना with M.
 746. °मन्दोद्योग[:°] M.
 747. °न्वाधांवेति M; read °द्वाधां वेति.
 750. Read °तया तं with M.
- After 756 M. adds the following verse:—

विहारवाटिके तुङ्गे-शापणे कम्पनापतिः ।

अन्वेषेन नन्दवने ससेन्या राजमन्त्रिणः ॥

"The commander of the army (stood) at Vihāra Vājika (?) on the Tuṅgēśāpaṇa (cf. VI, 190) and the other ministers of the king in the Nandanavana with soldiers.

760. °स्वेच्छुट° M.

764. °बाधिनिकां M.

766. विसङ्गोऽन M.

770. चेद्याप्य M, as suggested by P. Durgaprasad. दद्यात्तः M; cf. the footnotes in P. Durgaprasad's edition and in Dr. Stein's translation.

774. कृत्स्नं M; read कृत्स्नो.

777. Read °चक्रिकां with M.

780. °प्रतापेषु लवन्धेष्वथ M.

782. °स्थानवि° M, °स्थान्स्ववि° C, N, °स्थान्स वि° (which seems to be correct) D.

785. विरागभाक् M.

788. यो नास्ति प्यापदा M; read यो नान्तर्प्यापदा.

790. सिम्बाक्यो M. Read °यन्तार° with M.

798. धिरुग्ध° M.

800. Read °हैर्ययो° with M; cf. VIII, 824.

801. राज्ञो धैर्येण M.

802. पलादिने M.

803. नान for वासः M. Read °वर्षिणम् with C and D.

812. सवान्नङ्गं M.

813. Read प्रातरेवेत्य with M; see Pāṇini, VI, 1, 95.

814. °नैष्ठिक M.

816. निर्गतः M.

817. °रव° and तद्वत्त्वा M.

819. स भृत्यप्रोह° M.

821. °स्याच विनिश्चसन् M.

824. सुयुक्तः M. °वाक्यासी° M, N.

825. Read °निरोधिनः with M.

827. Read °न्यागेषु with M.

831. °वन्द्यद्विकिका° M.

834. °गौर्हि M.

844. °लासिष्टे° M.

845. °लोद्योतिना M.

847. Read °मन्त्रस्य वल्गु[तः] and चारुचामरे° with M.

848. Read निरुद्धाश्[ः] with M.

849. °कृत्योप° M.

850. Read स न्यदर्शयत् with M.

858. Read °रेभिषां with M.

859. °स्यावृष्टपूर्वस्य M.

861. चुञ्चो M.

862. °करणे M.

863. चान्तरतः M, as suggested by P. Durgaprasad.

864. धर्मे M.

872. °स्तत्तदन्व° M.

874. गेहे M.

898. चत्तोदुवा° M.

899. °काः प्रायं M; read °का प्रायं.

900. तेजा° M.

902. °दिनाव° M.

908. Read सान्त्वयमाना with M and D

906. °रुतैः M.
 909. तत्र for तत्र M. सोवधीन् M.
 918. Read नमस्सुम्भ with M.
 919. °चापानां M.
 920. वैताला° M.
 921. किमन्यथा° M. Read perhaps सुवहू°. °धस्तदुधान्स M ; read perhaps धस्तदुधान्स°.
 924. दृष्टा M.
 929. काण्ड° M.
 934. Read सान्ख्य° with D.
 944. °सिंहाद्यैः M.
 946. °तः पतन् M.
 948. कोपनर्तित° M.
 951. Read केशान्वय° with M.
 952. अकृष्ट° M.
 953. °रुहाम° and °दाङ्गार° M.
 955. स लावन्यान्य° M ; read स लवन्यान्य°.
 960. प्रस्थितो M and C ; cf. the footnote in Dr. Stein's edition. न्यधात् M.

The second half of verse 961, which is missing in other MSS., runs thus in M:—

अविक्रिया तस्य गूढा भृशेष्वासीदमर्षिणः ॥

"Inwardly this resentful (king) did not change (in his feelings) towards (his) servants.

962. °संस्पर्शजं M.
 968. Read स्वीचिकी° with M.
 970. Read 'दुरं with M.
 971. °भयङ्गनं M.
 975. निर्गुड° M.
 976. °वीपयन् M.
 980. Read °हेनाण्ड° with M.
 984. Read शावसंहार°.
 986. केपि नि° M.
 989. भस्मीभूता° and सिगिसिना° M.
 992. Read वाच with M.
 993. °बाज° M.
 997. °मङ्ग M.
 999. °वैराग्ये M, as suggested by P. Durgaprasad.
 1002. Here and in verses 1039 and 1043 M reads सिम्भ for सिम्ब, and in verse 1045 मिह.
 1005. °वाळासीनुल्हणो M ; cf. VIII, 1041, etc.
 1006. °रघुन् M.
 1018. बहुरो बहव (read °वी) हताः M.
 1019. Read °गनीकि with M.
 1021. Read perhaps विन्धेदेवा with C and N.
 1023. व्यवसायो M, as suggested in Dr. Stein's translation.
 1031. चेष्टाप्स्ये° M ; read चेष्टाप्स्य°. साक्षेपं M with L.
 1033. M fully confirms Dr. Stein's conjectural readings.
 1048. स्वक्काशिभ्य° M ; read स्वक्काशिभ्य° with C and D.
 1049. °पत्रे M.

M. omits verses 1052 and 1053 and continues thus :—

स्वीकृतान्यजनन्यौषो वशीकृततुरङ्गमः ।
सोमवारैः सह रणं चकार नगरान्तरे ॥
नृपावरो वैस्त्वो (स्वो) धामाशान्नोक्तिमथाकुलैः ।
विभ्रुणा क्षिपिकातीरे स्कन्वा (न्धा) वारं न्दवध्यत ॥

The first of these four lines, which is missing in other MSS., seems to be meant for

स्वीकृतान्यजनन्यौषो वशीकृततुरङ्गमः ।

"Having won over numerous other Lavanyas (and) having secured horses (for them), he commenced a fight with the horsemen within the city. Then Bhikshu pitched on the bank of the Kshiptikā a camp which was regarded with apprehension by the king's ladies from the top of the palace."

1056. राज्ञोद्याना° M.

Instead of verse 1059 M has the two following verses :—

तस्मिन्तावदः क (हम्भ) विसृतः ।
दानराणां स कटको बभूव विजयेश्वरं ॥
परेषां तु हवरो हस्तितः पृथ्वीहरावयः ।
प्रययुः सेतुमुल्लङ्घ्य जीवास्वस्थाः कथं चन ॥

1066. श्रोत्रिणी M.

1070. Read °छैर्य with M and C; the reading °छैर्य offends against Pāṇini, VI, 1, 95.

1073. वितस्ताया° and °ताइलान् M. तजा° M; cf. note on VIII, 900.

1080. °वाद्यतुमुल्लं M and D.

1083. °विच्छिदि° M.

1084. तेलो M. Read क्षत्रिया (as a separate word) with M; cf. L. निमिकास्थानसम्भ° M.

1090. °सिस्सुस्सनिस्सज्जताः M; cf. the footnote in Dr. Stein's translation.

1093. पाञ्चान्या फाल्गुनस्वेव M. Read °नापतुः with M.

1096. °धापयति M; this or °धापयथ is the correct reading.

1097. करे M. न तथा मज्जने पयः M.

1101. जीर्ण° M.

1102. लोहाशास्त्रजनकाद्यः M.

1103. Read तुरङ्गमं with M.

1112. Read श्रानिनी युद्धे राजसूनुसमीरणः and प्रासाम्भु° with M and translate :—

"These two removed in the fight by showers of darts, the distress (produced) by the prince (Bhikshu) as (the two months) Nabhas and Nabhasya (extinguish) by showers of rain the jungle-fire (fanned) by the wind."

1113. Read वीर° with M.

1117. Read °विकीर्ण्य with M.

1122. कैश्चि° M.

1127. Read °युत्तरं with M.

1129. कान्ति° M.

1130. प्ररोहं M.

1131. जन्मकेन M.

1133. महात्मजो दम्भ° M.

1147. तपाविधे M.

1148. °रपतिपक्षे M.

1151. तेनैव for संगम्य M.

1155. पुनश्च for वसन्ते M.

1159. Read निजैरेव with M.

1170. Read कृत्स्ने नगरे with M.
 1171. Read °स्वामितो with M.
 1174. Read °शैव with M and C.
 1175. °वेदमभिष्ट° M.
 1185. °तेषु च M and N.
 1186. Read °सेतोस्तम° with M.
 1190. भूमिकृते M.
 1192. °रक्तान् M, as suggested in Dr. Stein's translation.
 1193. °दलासयत् M.
 1194. भूत्येषु गच्छन्त्यु M.
 1198. प्रेरयन् M; read प्रेरयन्. Read व्यतीर्यन्त with M.
 1200. एकोप्यद्रा° M.
 1201. निपात्य and व्यूहे M.
 1202. व्यञ्जित° M.
 1203. °मानस्सोकारां M; read °माया[: *]स्तोकारां with C.
 1205. Read ज्ञापन् with M, N, C, D and स्नान् with D.
 1208. Read perhaps निष्ठा (for क्षिप्य) प्रवेदिरे.
 1221. कश्मीर° and °पुरान्तरे M.
 1223. Read °सस्तां with M.
 1229. °मव जातः M.

Instead of verses 1230 to 1236 of the printed text M has 161 other verses. That the latter are genuine follows (1) from their style, which is unmistakably Kalhana's, and (2) from the fact that the published text shows a gap in the narrative between the years [41]99 (verse 1151) and [420]³ (verse 1348), which is filled up by those verses: verse 50 specifies the year 100 (*i. e.* 4200), verse 79 the year [420]¹, verse 117 the year [420]², and verse 152 the year [420]¹. This period was occupied by continual fights between Sussala and his enemy Bhikshāchāra. Much of this passage is so corrupt that it seems difficult to publish the whole from M alone in an intelligible form. Here I shall note only the following occurrences:—Prithvīhara is killed by Rilhāra and Syāma (verse 13 f.); Prajji dies (verse 144); in Vaiśākha of the year [420]¹ Sussala leaves Śrinagar for the last time (verse 152).

1237. °देवी गूढं कन्दलवज्रयं M.
 1238. स सं वन्धुं M.
 1241. स्वमान्निभिः M.
 1246. Read perhaps सान्निध्यं for सन्निर्यं.
 1248. व्यापादयाम्यहं M.
 1252. भव्यमवर्णयन् M.
 1258. क्षौद्रे M.
 1259. Read सुजिना with M.
 1260. वाटपुत्राय° M.
 1269. °वतरे: and °दोषदो M, which adds the following verse:—

यावन्नामस्य वरुडस्य विधेयस्य विरोधिनां ।

हिमागमो नरपतेः परिपन्थितमावयो ॥

"The beginning of winter prevented the king from inflicting any punishment on the enemies."

1270. °अवर्तत M.
 1271. °न्ताकनण° M.

1275. निपतेर्देहुर M; read निपतेहुर. Read कन for कनेत् with M.
 1296. Read प्रकृतुमैच्छंस्वानार° with M. कंवि° M with L.
 1299. Read स्वात्वा प्रतीक्षे (" Having bathed I shall wait for (you)") with M.
 1301. साशङ्को M.
 1312. व्यात्र° M, व्यात्रः C.
 1318. करकृपादञ्जको M; read करकृपादञ्जको, as suggested by P. Durgaprasad.
 1320. कटके M.
 1321. समोरौ M.
 1323. °नार्गयानिधं M.
 1326. पक्षद्वारेण M.
 1328. °पक्षेः M.
 1331. For the use of *alam* with the gerund, see Pāṇini, III, 4, 18, and Māgha, II, 40.
 1332. जात° M with C and D.
 1334. आधरेणासु° M.
 1339. एवं वैजन्वकजं M.
 1341. कथन M with C.
 1349. Read °ख्येनेरख and see my notes on VIII, 813 and 1070.
 1350. योनुभवः M.
 1351. Read स्थित्वा with M.
 1352. आधनैः M.
 1354. Read विशोधिते with M.
 1355. °नृप° M. °अनवगन्वा° M, as suggested in Dr. Stein's translation.
 1356. Read शीघ्र° with M.
 1357. °लकं and संवर्शने M.
 1360. सङ्दृष्टतां M.
 1362. Read हस्तुपालन° and पिञ्चैरमास्त्रैः with M.
 1364. लोहरे M.
 1366. Read तादृश्या with M.
 1367. Read °स्थितिः with M.
 1368. Read °नाह्वादि° with M; cf. Pāṇini, VIII, 2, 84, and Māgha, V, 15.

ON THE ORIGIN OF THE NĀRADA-SMṚITI.

BY K. P. JAYASWAL, M.A. (OXON.). BARRISTER-AT-LAW.

I should like to draw the attention of orientalists who are interested in the study of the *Smṛiti*, to one of the sources of the *Nārada-smṛiti*. I brought out the point in the course of a series of articles discussing the connection between the *Artha-śāstra* and the *Dharma-śāstra*.

The procedure law of the *Nārada-smṛiti* is greatly based on the *Dharmasthīya* book of the *Artha-śāstra* of Kauṭilya. In the preface the *smṛiti* avows that it is based on Manu, while it seldom follows the Code of Manu. The importance of the *Artha-śāstra* in Hindu legal history is so very considerable that we shall be justified in treating the Book on Law (*Dharmasthīya*) as a part of the permanent legal system of the Hindus. The *Mānava-dharma-śāstra*¹ criticises it, the *Yājñavalkya*² borrows from it, and the *Nārada-smṛiti* adopts its purely secular treatment and its principles of procedure law.³

¹ See *The Doctrines of Equity in Hindu Jurisprudence*, *Calcutta Weekly Notes*, Nos. 39, 41, and 42, (1911). (Or. also the *Archiv für Rechts und Wirtschaftsphilosophie*, V, 4, where the articles have been discussed.)

² C. W. N., 1913, No. 39.

³ of C. W. N., Nos. 44 & 45, 1913. See NS., Introduction, 2, 7, 10, 11, 37, 39, 40, and AS., vermas at p. 150 (ed. Shama Sastri); of also the laws of evidence in AS., III, 11, with NS. I.; rules about plaint and written statement in AS., III, 1, with those in NS., Intro. II.

MISCELLANEA.

A NOTE ON THE "ORIGIN AND DECLINE
OF BUDDHISM AND JAINISM IN
SOUTHERN INDIA."

I have read with some interest the paper on *The Origin and Decline of Buddhism and Jainism in Southern India* written by Mr. K. V. Subrahmanya Ayyar and published in the pages of this *Journal*. I cannot leave the subject without making a few observations on some statements made by the author which are wrong and consequently likely to become mischievous. I shall not trouble myself with the first part, which is based exclusively on the *Mahāvastu*, whose authenticity for historical purposes has been questioned by scholars, but shall confine my observations to the latter part. But, before doing so, I shall notice in brief one point. Our author says that the famous Bauddha bhīṣaka, Ariṣṭa, who was the maternal uncle of Dēvānāmpīya Tissa, might be the person after whom the village of Ariṣṭāpatti in the Madura District, must have been named. There is as much likelihood as not for such a supposition. If the Brāhmi inscriptions found there call the village by the name Ariṣṭāpatti, we could easily take it to have been named after this Bauddha apostle. On the other hand our friend himself states that one of the Vaṭṭeḷuttu inscriptions found in that region mentions a Ariṣṭanēmi. There is now a probability of the place being called after this person also; so then, one cannot be certain as to the origin of the name of the village. It is apparent that, since this fact came in handy enough to bring home a theory of his making, Mr. Ayyar has utilised it here. I do not mean to say that he himself could not have perceived the difficulty in an identification of the kind he has made.

A similar error is committed by coupling the name of an Ajjaṇandi mentioned in the Tamil epic *Jivakachintamani* and a similar name found in inscriptions. I would be the first person to accept such an identification if the date of any of the two factors of the identity had been known. Has our author determined the approximate date at least of this Tamil epic poem? Or, does he know the period in which the Jaina dchārya mentioned in the stone records lived? If neither of these dates is known, how can we assert that the two Ajjaṇandis are identical?

From a careful study of the hymn of Tirujñānasambandar, one would perceive that he ridicules the curious names of the Jaina gurus, rather than gives a list of his contemporaries of the Jaina persuasion, who lived on the Āpaimalai hill.

He says "As long as I have the grace of Siva of the temple at Ālavāy (Madura), I would not feel helpless, before the blind fools of Jains who hail with the names Sandusēṇaṇ, Indusēṇaṇ, etc., and who like monkeys, go about without any knowledge either of the Āryan tongue or of the refined Tamil." The vein of derision is seen when he talks of the swarthy colour of these people, while he describes Kandusēṇa, an imaginary personage. The very peculiar satirical tone of Tirujñānasambandar is visible throughout the verses referred to here. He also plays upon the names of the religions that were in vogue at that time, Andanām (Brahmanism), Arugandanām (the religion of the Ārhanṭas), Puttanām (that of Buddha), Sittanām (of the Siddhas), etc.

Another statement which cannot go unquestioned is: "The time of the three Ālvārs has been definitely made out. They belong to the latter half of the 8th century A. D. and seem to have held high position in life. What Jñānasambandar and Appar are to the Śaivites, Nammālvār and Tirumāngai are to the Vaiṣṇavites of the south. The hymns composed by them are equally stirring. Madhurakavi was the minister of the king Neḍuñḍaiyaṇ and Nammālvār was the magistrate of the town of Ālvār-Tirunagari in the Tinnevely District. It is easy to conceive the amount of influence they might have brought to bear upon the people." Will Mr. Ayyar be good enough to tell us who has made out the time of these Ālvārs and how it is definite? Where is it said that Madhurakavi, the Ālvār, was the minister of Neḍuñḍaiyaṇ or that Nammālvār was the District Magistrate of the district of Ālvār-Tirunagari in the Pāṇḍya kingdom? Was the name of the place in which the latter Ālvār was a magistrate the same as is given by our author in these days, or did it come to be known after the Ālvār at a subsequent time? For aught we can gather from the *Garuparampara* of the Śrīvaiṣṇavas, Madhurakavi, the Ālvār, was a poor Brāhmana born in Tirukkōḷūr, long before Nammālvār was born, and had travelled far and wide on pilgrimage, and eventually became the disciple and constant companion of his master, Nammālvār. He does not appear to be a master in the art of composing sweet verses and therefore called Madhurakavi, for the only composition of his that we have got at present is only a decade of verses in praise of his master. These verses do not speak much for his capacity for making sweet verses. The minister of Neḍuñḍaiyaṇ is called Māraṇ-Kāri (Kāri the son of Māraṇ, Māra-sēnu), and

was born in the Vaidya-kula in the town of Karavandapuram (Kaḷakkāḍu in the Tinnevely District). He was remarkable for his sweet compositions and was also known on that account as Madhurakavi. Except in the matter of identity in the name Madhurakavi, there is nothing to prove that the Āḷvār, a Brāhmaṇa of Tirukkoḷūr, was the same as the Vaidya of Karavandapuram.

A curious dictum which finds favour with the official epigraphists of Madras is that he who mentions another must be a contemporary of the former. The late Mr. Venkayya held that Tirumangai must be a contemporary of Nandivarman Pallavamalla and Vayiramāgan, because he praises them as the benefactors of certain temples. Similarly, Māṇikkvāṇṇaka, who mentions the name Varaguna in his work must be the latter's contemporary. If to-day someone writes the biography of another, say Mr. Vincent Smith of the life of Asoka, could he be called the contemporary of that Bauddha Emperor?

The most egregious of all the blunders is contained in the statement: 'The proper names of Nammāḷvār and Madhurakavi suggest that the former must have been the father of the latter. As Madhurakavi appears to have died at some time prior to A. D. 769-70, if Tirumangai was his contemporary, there is every likelihood of the latter having lived in the reign of Nandivarman Pallavamalla,' (p. 217, f. n. 33). What are the proper names of the two Āḷvārs according to Mr. Subrahmanya Ayyar? how does he claim to have identified the first as the father of the second? Does he not know the former was a Brāhmaṇa, while the latter is said to have been a person of the fourth caste? Was not the birth of Nammāḷvār unknown to Madhurakavi, and the latter, finding the south glowing with a divine light, traced his steps from Ayódhyā to seek this light? If all this tradition is idle, I should object to our friend utilising from the idle tales those portions which say that Nammāḷvār was called Kārimāraṇ, that he was a magistrate (?) of Āḷvār-Tirunagari, etc. Most certainly Madhurakavi, the Āḷvār, was not the father of Nammāḷvār. I would rather put it that the minister, Māraṇ-Kāri, alias Madhurakavi, was the father of Nammāḷvār, and the latter gave the name of his father to his disciple Madhurakavi, the Āḷvār. In that case I am myself prepared to admit that Nammāḷvār lived about the beginning of the 9th century of the Christian era.¹ It is no wonder that Mr. Ayyar commits so many mistakes, because he follows only in

the footsteps of Venkayya, who is the first to blunder in that manner in the construction of the history of the Śrīvaiṣṇava Āḷvārs and Āchāryas.

The article is a fine specimen of working facts into preconceived theories and basing argument on *ipse dixit*. A wrong theory is tolerable, because, it is ever subjected to examination, while a wrong fact, if allowed to remain uncontradicted, is likely to prove mischievous in the hands of subsequent students of history, who, because this fact has remained unchallenged, would assume it to be true, and in their turn commit serious blunders. By repetition a wrong fact, even a wrong theory, acquires the status of truth. No more glaring instance of this statement could be quoted than the theory of the Gaṅga-Pallavas, which, when facts against it were placed before Prof. Hultzsch, its author, was accepted by him to be no more tenable, but is still frantically hugged to the bosom by its supporters in India, i. e. by scholars like Messrs. Venkayya, Krishna Śāstri and others.

Trivandrum.

T. A. GOPINATHA RAO.

COINS OF AMRITA-PĀLA, RĀJA OF BADAUN.

In my *Catalogue of the coins in the Indian Museum, Calcutta*, vol. I (1906), pp. 244, 249, and Plate XXVI, 6, I described certain rare silver coins of the "bull and horseman" type under the name of Asata-pāla, and doubtfully connected them with the mintage of the kings of Ohind.

Mr. Richard Burn has proved to me that the correct reading is Amrita-pāla, and that the coins were struck by the prince of that name, mentioned in the long inscription now in the Lucknow Museum, and edited by Kielhorn in *Epigraphia Indica*, vol. I, pp. 61-66. The inscription was found in the ruins of the south gate of the old fort of Badaun, U. P. It treats of the foundation and endowment of a temple of Śiva, erected apparently at Badaun, which is called Voda-mayūtā. The record gives the genealogy of a Rāshtrakūṭa Rājā named Lakanapāla, the younger brother of his predecessor, Amrita-pāla, who is described as having been learned, pious, and valiant. It is possible that there may have been a date at the beginning of line 23, but Kielhorn could not read the characters. The script is that of about A. D. 1200.

V. A. S.

¹ Elsewhere I have stated that Nammāḷvār must have lived about A. D. 1,000, which my subsequent researches have shown to be wrong. I am getting a paper ready on the subject, once again dealing with the Śrīvaiṣṇava chronology in the light of these fresh facts.

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ERRATA.

Page 301, line 5 from bottom read, चान्येपि नन्दनवने.

Page 304 line 16 from top, read हयरोहस्ततः

Page 304 verso 1093, read पाव्याह्वयौ.

Page 305 verso 1192, read २रकेन.

Page 306 verso 1332 read जातः.



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THE BOWER MANUSCRIPT.*

CHAPTER I.

THE DISCOVERY OF THE BOWER MANUSCRIPT: ITS DATE, LOCALITY, CIRCUMSTANCES, IMPORTANCE, ETC.

THE Bower Manuscript, which is named after its discoverer, Lieutenant (now Major-General) H. Bower, C. B., fell into the hands of that officer, early in the year 1890, in Kuchar, where he had gone, on a confidential mission from the Government of India, in quest of the murderer of Dalglish.¹

Kuchar, or Kuchâ,² situated about 41° 42' 50" N. Lat., and 80° 33' 50" E. Long., is the name of one of the principal oases and settlements of Eastern Turkestan, on the great caravan route to China which skirts the foot of the Tian Shan Range of mountains on the northern edge of the Takla Makan desert.

On his return to India, Lieutenant Bower took the manuscript to Simla, whence in September 1890 he forwarded it to Colonel (now Major-General) J. Waterhouse, who was then the President of the Asiatic Society of Bengal. By him it was exhibited to the Society at their monthly meeting on the 5th November 1890, when also a short note (see below, No. i, p. iv) from Lieutenant Bower, dated the 30th September 1890, was read explaining the circumstances of the discovery. Some attempts were made after the meeting to decipher the manuscript, but they proved unsuccessful.³ At the time I was absent on furlough to Europe. It was on my return voyage to India that I received the first news of the discovery through a copy of the *Bombay Gazette* which fell into my hands at Aden. By a lucky chance, Major (now Major-General) W. B. Cumberland whose companion Lieutenant Bower had been during the earlier part of his travels, happened to be a fellow passenger on the steamer, and furnished me with corroborative information. On reaching Calcutta in February 1891, being then the Philological Secretary of the Asiatic Society of Bengal, I at once claimed the manuscript from Colonel Waterhouse, who most readily made it over to me. At the April meeting of that year, I was able to communicate to the Society the first decipherment of the manuscript which was immediately published in its *Proceedings* (April, 1891), pp. 54-65.⁴

* Reprinted, with additions, from the Introduction to the Edition in Volume XXII of the *New Imperial Series of the Archaeological Survey of India*.

¹ See the *Geographical Journal* of the Royal Geographical Society, Vol. V (1895), p. 240.

² The spelling *Kuchar* represents the local pronunciation of the name, see M. A. Barth in *Comptes Rendus of the Académie des Inscriptions & Belles Lettres*, 1907, p. 21. The spelling *Kuchâ*, or *Kucha*, (Chinese *K'iatse*), as Dr. A. von Le Coq informs me (letter of 24-10-1909), occurs on coins and public documents. It is used, e. g., in Dr. M. A. Stein's *Ancient Rhotan*, Vol. I, p. 8, *et passim*, also in M. Chavannes' *Documents sur les Turcs Occidentaux*, p. 8, *et passim*. The latter work may be consulted on the ancient history of Kuchar. It is one of the four territories, or so-called "Garrisons," the other three being Kâshgar, Khotan, and Karashahr, which anciently constituted Eastern Turkestan.—The latitude and longitude of Kuchar above given, are those which have lately been determined by Dr. Vaillant of the French Expedition with a possible slight error of 300 or 400 metres in latitude, and of about 1,000 metres in longitude, as communicated to me by him in his letter of the 5th January 1910. See also his article in the *L'année Cartographique*, October, 1910.

³ See *Proceedings*, Asiatic Society of Bengal, 1890, p. 221.

⁴ The whole story of the discovery and decipherment of the Bower Manuscript is reviewed in Sir Alfred Croft's Presidential address to the Asiatic Society of Bengal in their *Proceedings* for 1892, pp. 61-63. See also Sir Charles Elliott's Presidential Address in the *Proceedings* for 1894, pp. 31-34.

It was the discovery of the Bower Manuscript and its publication in Calcutta which started the whole modern movement of the archaeological exploration of Eastern Turkestan.⁵ The late Hofrat Professor G. Bühler, having seen the report of the discovery in the *Proceedings* of the Asiatic Society of Bengal, at once announced it in an early issue of the *Vienna Oriental Journal* for 1891, p. 103. The Russian Archaeological Society, having thus their attention attracted, addressed, in November 1891, a request to Mr. Petrovski, the Russian Consul General in Káshgar, to endeavour to collect similar manuscript treasures.⁶ In response to it the Petrovski Collection went to the Imperial Library in St. Petersburg, in the autumn and winter of 1892-3, of which Professor Serge d'Oldenburg published a report and specimens in the *Transactions* of the Imperial Russian Archaeological Society, Vol. VIII, for 1893-4, pp. 47 ff. In the same year, 1892, the Weber Collection of manuscripts was acquired by the Rev. F. Weber, Moravian Missionary in Leh, whose curiosity had been aroused through a meeting with Lieutenant Bower on the latter's return journey to India (see below No. iv, p. vi). This acquisition was at once transmitted to me, and a report and specimens were published by me in the *Journal* of the Asiatic Society of Bengal, Vol. LXII of 1893, pp. 1 ff.⁷ In the following year, 1893, on my motion, the Government of India issued instructions to their Political Agents in Kashmir, Ladak, and Káshgar, to make enquiries for ancient manuscripts, and secure all that might come in their way.⁸ It was in pursuance of these instructions that the "three Further Collections" of manuscripts came into my hands, of which a report and specimens were published by me in the *Journal* of the Asiatic Society of Bengal, Vol. LXVI, of 1897, pp. 213 ff.⁹ The most important, in the present connection, of these three collections are the Macartney manuscripts, so named after Mr. (now Sir) George Macartney, K. C. I. E., the British Consul in Káshgar, who secured them in 1895.¹⁰

The direct result of these discoveries of ancient manuscripts was the inception of the first expedition of Dr. (now Sir) M. A. Stein, K. C. I. E., into Eastern (or Chinese) Turkestan in 1900-1901, of which a report was published by him, in 1902, in his *Ancient Khotan* in two volumes.¹¹ It is true that there had been numerous expeditions into that country in earlier years, such, e.g., as the Russian expedition of General Préjevalski in 1878 and 1885, the British expedition of Major (now Lieut-Colonel) Sir Francis E. Younghusband, K. C. I. E., in 1887-90, the French expedition of M. Dutreuil de Rhins in 1891-2, and the Swedish expedition of Dr. (now Sir) Sven Hedin, K. C. I. E., in 1894-7,¹² but none of these was

⁵ See, e.g., Bühler in the *Vienna Oriental Journal*, Vol. VII., (1893), p. 260, Dr. Stein in *Ancient Khotan*, Introduction p. v; M. Pelliot, in *Comptes Rendus des Séances*, 1907, p. 166, also *infra*, No. x, p. ix; Professor S. d'Oldenburg, in the *Journal* of the Imperial Russian Archaeological Society, Vol. VIII., 1893-4.

⁶ See *Transactions* of the Imperial Russian Archaeological Society (1892), Vol. VII., pp. 81-2.

⁷ The Weber Manuscripts, which were subsequently purchased by me from Mr. Weber (*Journal*, As. Soc., Beng., Vol. LXVI., 1897, p. 239, footnote) passed, in 1902, into the possession of the Bodleian Library in Oxford; see its Catalogue, Vol. II., p. 111, No. 1091.

⁸ For particulars, see my *Report on the British Collection of Central Asian Antiquities*, Part I., Introd., p. ii; also *Proceedings*, Asiatic Society of Bengal, 1893, p. 65.

⁹ See also my *Report on the British Collection of Central Asian Antiquities*, Part II., being an Extra Number to the *Journal*, Asiatic Society of Bengal, Vol. LXX., 1901.

¹⁰ Since 1902 they are in the possession of the British Museum in London.

¹¹ On its inception, see Introd., pp. v, vi. The expedition started from Kashmir on the 31st May 1900, and returned to London on the 2nd July 1901.

¹² For two fuller, though still not quite complete lists of such expeditions, see the *Geographical Journal*, R. G. S., for 1893, p. 37, and the *Journal*, R. A. S., for 1909, p. 299; also Professor W. Geiger on *Die archäologischen und literarischen Funde in Chinesisch Turkestan und ihre Bedeutung für die orientalische Wissenschaft*, Rede beim Antritt des Prorektorates der Königlich Bayerischen Friedrich-Alexander-Universität Erlangen, November, 1912.

undertaken with the object of archæological exploration. Their main object was scientific, *i.e.*, geographical, geological, zoological, and the like, and any antiquities which they brought home had been gathered, as it were, accidentally and by the way. The first expedition to Eastern Turkestan which was undertaken avowedly for the purpose of exploring the country archæologically, and excavating ancient sites, was the Russian of M. D. Klementz in 1898.¹⁰ As in the case of the expedition* of Sir Aurel Stein, it owed its inception directly to the stimulus imparted originally by the discovery of the Bower Manuscript. A series of archæological expeditions now followed in rapid succession. It comprised the first German expedition, led by Professor Grünwedel, in 1902-3; a Japanese expedition, in 1902-3, under Count Otani;¹¹ the second German (or first Prussian) expedition, under Dr. A. von Le Coq, in 1904-7; and the second Prussian expedition led again by Professor Grünwedel, in 1905-7. These were followed, in 1906-8, by the second British expedition of Sir Aurel Stein, which was extraordinarily successful, and fruitful of archæological results, and of which a preliminary account was published in the *Geographical Journal* (for July and September 1909). The last of the series was the French expedition, under M. Paul Pelliot in 1907, which has recently (autumn 1909) returned to Europe. As it made a particular point of thoroughly exploring the district of Kuchar, where the Bower Manuscript was found, its full and final report when it appears may be hoped to set at rest any still remaining doubts regarding the exact locality and time of its discovery.¹²

In the meantime the publication of the Bower Manuscript steadily pursued its course. The proposal to prepare a complete edition of its text, illustrated with facsimile Plates, and accompanied by an annotated English Translation, was a corded, in 1892, the sanction of the Government of India through the cordial support of Sir Charles Elliott, the then Lieutenant-Governor of Bengal. The first part of the edition appeared in 1893; the Second Part (in two fasciculi) in 1894-5, and the remaining Parts III to VII in 1897. This completed the edition of the text and translation. After an interruption of several years, caused by my retirement from India and engagement in other time-absorbing work on subsequent finds of ancient Central Asian Manuscripts, the Sanskrit Index, being a complete vocabulary of the Bower Manuscript, was published in 1908, and a Revised Translation of its medical portions, in Parts I, II and III, in 1909. The Introduction, benefiting by the long delay and the attendant material increase of information, now brings the laborious work of the edition to its long-desired completion.

The Bower Manuscript itself, which till the completion of the edition of the text in 1897 had remained in the hands of the editor, was returned, in April 1898, to its owner, Colonel Bower. By him it was taken to England, where it was finally purchased, in 1898, by its present possessor, the Bodleian Library in Oxford.¹³

It remains to determine, so far as it is possible with the evidence at present available, the exact locality and the exact time of the discovery of the Bower Manuscript.

* Since the above list was written, two new expeditions have been undertaken, and are now in progress: a German under Dr. A. von Lecoq which left Berlin in April, 1913, and a British, under Sir Aurel Stein, which started from Kashmir, in August, 1913.

¹⁰ A report was published in the *Transactions of the Imp. Russian Archæol. Soc.*, Vol. XIII. of 1899; transl. into German by O. v. Haller.

¹¹ A summary report appeared in the *Century Magazine* for October, 1906.

¹² A preliminary report, read in the séance of the French Academy, on the 22nd of March 1907, is referred to in the sequel (No. x. p. viii). The preliminary sketch map of the Kuchar district, which illustrates this chapter, was, in response to a request from me, most kindly prepared by Dr. Vaillant, who had accompanied M. Pelliot on his expedition.

¹³ In the Second Part (1905) of the Library Catalogue it is No. 1090, p. 110.

(i) The earliest information on the subject is contained in the note of Lieutenant Bower, which accompanied his transmission of the manuscript to Colonel Waterhouse, and which is published in the *Proceedings of the Asiatic Society of Bengal* for 1890, p. 221. It is dated from Simla, the 30th September 1890, and runs as follows:—

* While at Kuchar a man offered to show me a subterranean town, provided I would go there in the middle of the night, as he was frightened of getting into trouble with the Chinese, if it was known that he had taken an European there. I readily agreed, and we started off about midnight. The same man procured me a packet of old manuscripts written on birch bark. They had been dug out of the foot of one of the curious old erections, of which several are to be found in the Kuchar district. There is also one on the north bank of the river at Kāshgar. The one out of which the manuscripts were procured is just outside the subterranean city.

"These erections are generally about 50 or 60 feet high, broad in proportion, and resembling somewhat in shape a large cottage loaf. They are solid, and . . . are principally composed of sun-dried bricks, with layers of beams now crumbling away. Judging from the weather-beaten appearance they possess, and taking into consideration the fact that in Turkestan the rain and snowfall is almost nominal, they must be very ancient indeed . . .

"The subterranean ruins of Ming-oi, to which my guide had promised to take me, are situated about 16 miles from Kuchar on the banks of the Shāhyār river, and are said to be the remains of Afrasiab's capital. The town must have been of considerable extent, but has been considerably reduced owing to the action of the river. On the cliffs of the left bank high up in mid-air may be seen the remains of the houses still hanging on the face of the cliffs.

"One of the houses I entered was shaped as shown in the sketch (Fig. 1). A—B represents a tunnel, 6 yards by 4 yards, through a tongue-shaped hill. C and D are entrances, the hill being almost perpendicular at A and B. 1, 2, 3, 4, 5 are cells, roughly 6 feet by 6 feet. The walls have been plastered, and what appear to be the remains of geometrical patterns can be made out.

"I was told the remains of other similar towns may be seen in the district." In Yaquib Beg's time a lot of gold was dug up." . . .

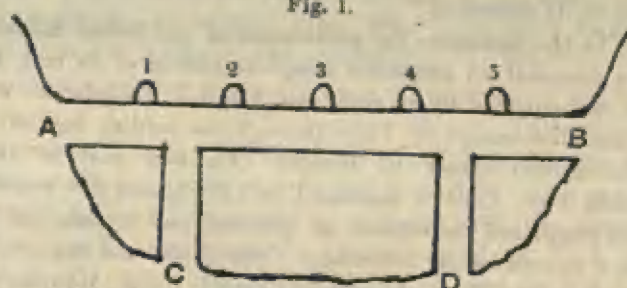


Fig. 1.

Sketch through a portion of the Ming-oi of Qumtūd.

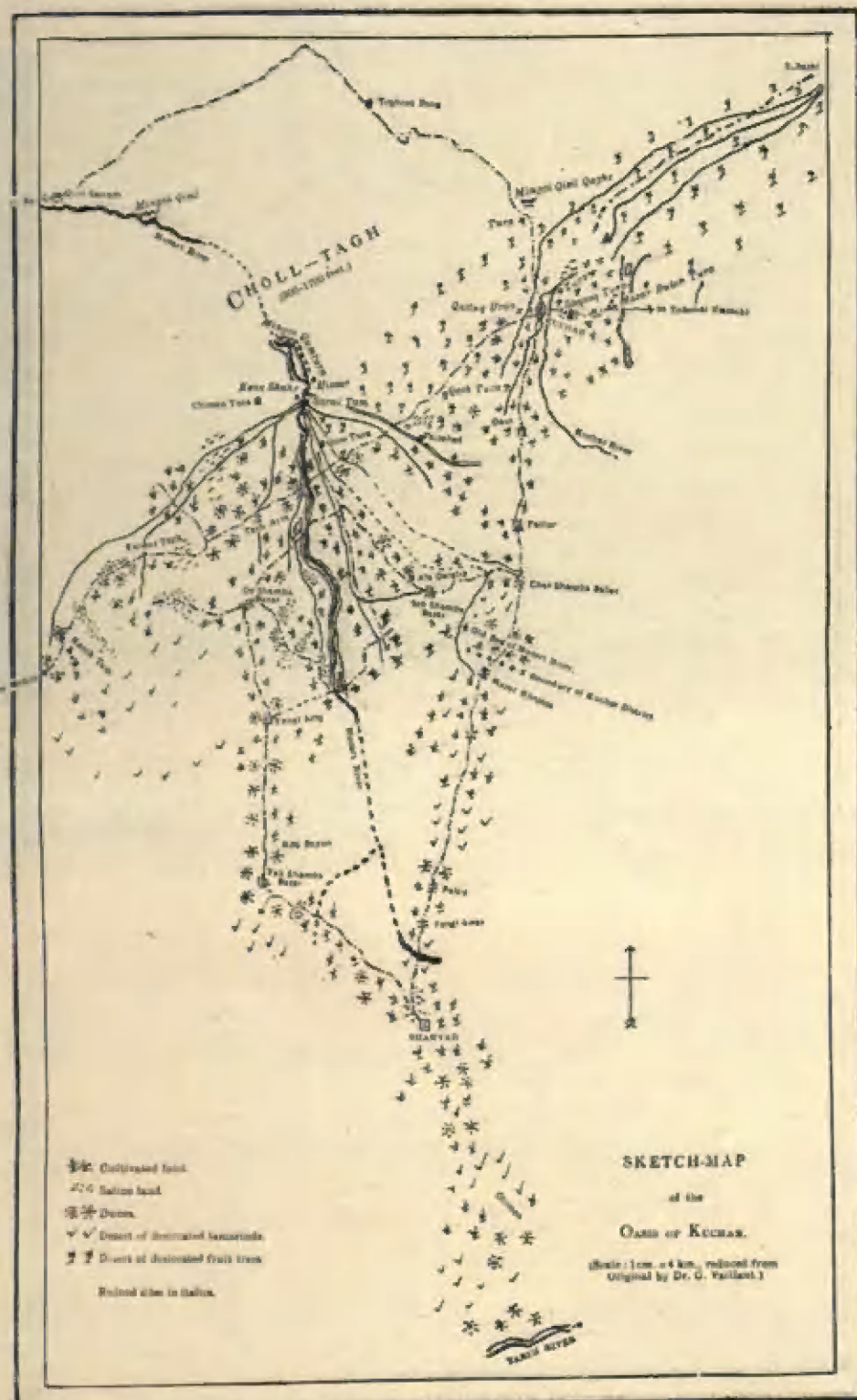
(ii) Nearly two years later, in a letter dated Kasauli, the 17th August 1892, written in response to a request by me for further particulars, Lieutenant Bower wrote as follows:

* The story of the finding of the manuscripts is this. A man in Kuchar told me of the existence of an underground city, and said that he had gone there to dig for treasure a few days previously, but had only succeeded in finding what he called a book. I asked him to show it to me; and he went away, and came back bringing the manuscript as it now is. He was anxious to sell it and . . . I was very glad to pick up for a small sum what might prove of great value.

"I induced him to take me to the underground city; and as he was frightened that he might get into trouble for taking a stranger there, we marched in the night. When day broke, we found ourselves amongst some low barren hills,¹⁷ and keeping on, came to the banks of a river, and there the hills were tunnelled by the streets of the ancient city. I asked the guide to show me the place he had dug the manuscripts out of and he took me to the large mound-like erection that I have alluded to before (see No. 1), to the best of my recollection about 500 yards from the underground city, and showed where a hole had been recently excavated straight in, level with the ground. There some bits of wood lay about, but in a very crumbly state.

¹⁷ As a fact, similar Ming-oi, or large groups of rock-cut caves, exist at Qizil, west of Kuchar, higher up the Muzart river; at Qizil Qāghē, north of Kuchar; and at Buton Turī east of Kuchar; also further north-east, at Subashi and Simsin. See the Sketch Map.

¹⁸ According to Sir Aurel Stein (letter of 3rd December 1909) "very low broken conglomerate ridges approach the town from north-west and west."



I. MAP OF EASTERN TURKESTAN

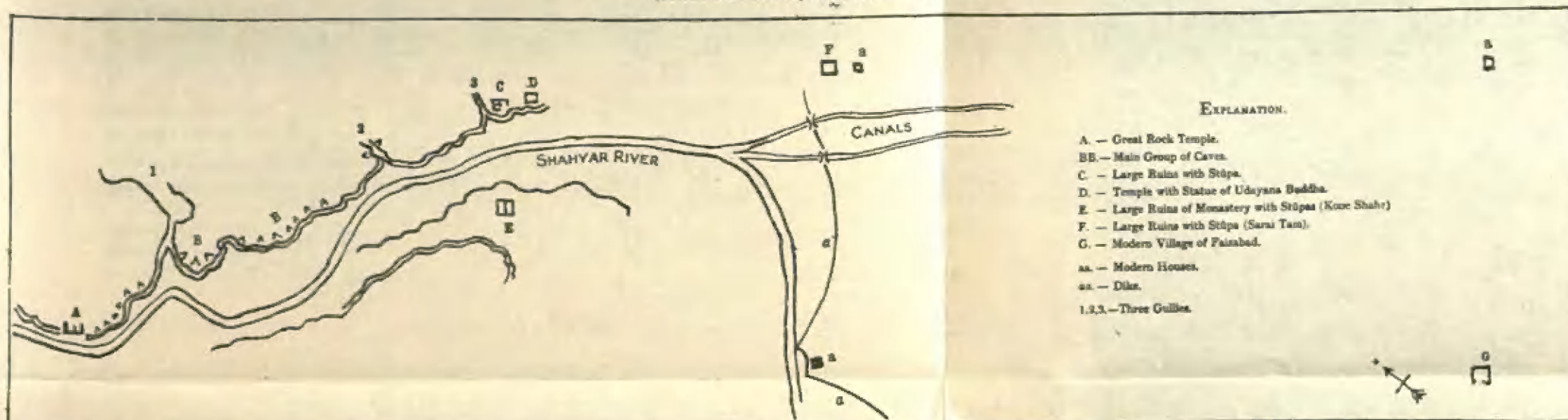
(From the Geographical Journal, 1893.)

Scale, 1:100,000.



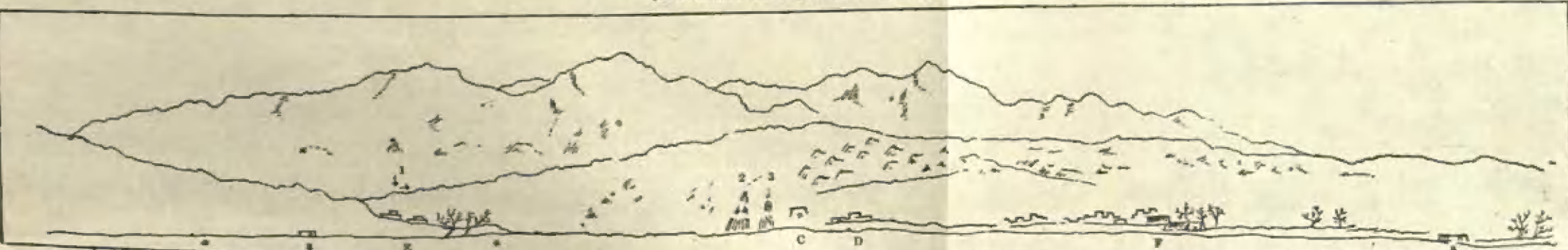
II. ROUGH PLAN OF THE MINGOI OF QUM TURA

(Reduced from a Sketch by Professor Gruenwedel.)



III. SKETCH VIEW OF THE MINGOI FROM NNW. OF QUM TURA

(Reduced from a Sketch by Professor Gruenwedel.)





"A more perfect hermetical sealing than the mound formed it would be impossible to imagine as the outside had a slight coating of a baked clayey nature,... — ...and the documents had been buried right in the centre of it. The statement that they were dug out of the ruins of the underground city is a total misconception of the facts.¹⁹ ... — ..."

I think I saw about Kuchar five or six of these mound like erections.²⁰ This (Fig. 2) will give you a rough idea of the erection. The asterisk indicates the place where the documents were found."

(iii) Again three years later, in 1895, Captain Bower repeated his account of the acquisition of the manuscript in a paper contributed by him to the *Geographical Journal* of the Royal Geographical Society of London, in which he described his trip to Turkestan. That account, in Vol. V., pp. 254 ff., was as follows:—

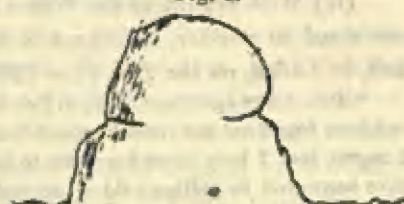
"At Kuchar, where I halted for several days, a Turki who had been in India, used to come and sit with me in my room in the *serai*. One day in conversation, he told me about an ancient city he knew of, built underground in the desert. I thought at first that he meant one of the ordinary buried cities of the Gobi desert; but he insisted that it was something quite different, and explained that it was underground by the wish of the people that made it, not by reason of a sandstorm. He told me also that he and one of his friends had gone there and dug for buried treasure, but had found nothing but a book. I asked to see it; and going away, he returned in about an hour, bringing some sheets of birch bark covered with writing in a Sanskrit character and held together by two boards. I bought them from him; and it was fortunate that I did so, as they have since excited a considerable amount of interest in the learned world ... — ... When I asked him to take me to this interesting place, he demurred a good deal, on the ground that the people would kill him, if he took an European there; but at last he consented on condition that we went at night, so as not to be seen. This I readily agreed to do; and starting at midnight, we marched steadily forward in a westerly direction. When daylight broke, we had left cultivation far behind, and were on the shoulders of a range of low gravelly hills, and away to the south a narrow strip of green with houses at intervals marked the course of a canal. Keeping on, we came to the curious old erection from under which the manuscript had been unearthed. Similar erections are found in different parts of Chinese Turkestan ... — ... They are solid, and built of sun-dried bricks and wooden beams now crumbling away. In shape they roughly resemble a gigantic cottage loaf, about 50 feet high.

"Close by, on the banks of a river, were the remains of the ancient underground city of *Ming-oi* to which the guide had promised to take me... — ... High upon the face of the cliffs overlooking the water, the marks of what have been habitations are to be seen worn away in such a manner as to show sections,... — ... I entered one of the tunnels. It was shaped as under ... — ..."

Here follows the section through the *Ming-oi* (Fig. 1), and its explanation, exactly as given in No. i (p. iv).

With the help of the Topographical Plan and View of the *Ming-oi* of Qum Turâ (see Frontis-piece, Nos. II and III), which I owe to the kindness of Professor Grünwedel, the description of Lieutenant Bower's march will be readily understood. He approached the *Ming-oi* from the east, from Kuchar. (See the Sketch Map of the Oasis of Kuchar.) At day-break he was above the point marked A on the Plan, looking "away to the south" on the double canal with its narrow strip of green cultivated land, and the houses belonging to the large village of Faizâbâd. "Keeping on" he came to the ruined Stûpa of the manuscript

Fig. 2.



Sketch of the ruined Stûpa at Qumturâ.

¹⁹ This apparently refers to the remarks of Bühler in his paper on the discovery of the Bower Manuscript in the *Vienna Oriental Journal*, Vol. V. (1891), pp. 103 and 302.

²⁰ As a fact, there are four ruined Stûpas near Qum Turâ, one at Qosh Turâ, and one at Qutluq Urdâ (letter from Sir Aurel Stein, 3rd Dec. 1909)—all six on, or near, the line of Lieut. Bower's march to the *Ming-oi* of Qum Turâ. See the Sketch Map. Of the four Stûpas near Qum Turâ two are at D, one at A, and one at C, of the Topographical Plan.

at the point marked C, "Close by," at the distance of about 500 yards (see No. i), was the main group of caves on the left bank of the river, into one of the tunnels of which Lieutenant Bower entered. On his return, he went to the village of Faizābād, the houses of which he had, earlier in the morning, discerned from a distance, see below p. xiii.

(iv) With regard to the Weber Manuscripts, the earliest reference to their discovery is contained in a letter, addressed to me by the Rev. F. Weber, of the Moravian Mission in Leh, in Ladak, on the 21st June 1892. Translated from the German, it runs as follows—

"Two years ago I met here in Leh the traveller Captain Bower. He showed me an old book which had been found not far from Yarkand,²¹ and which he intended submitting to you ... I regret that I have never been able to learn anything about the age of that book; but in the meantime I have succeeded in getting hold of an undoubtedly very old book, which I venture to submit to you for critical examination. It was found, the year before (*im vergangenen Jahr*), not far from Kugiar on the border of Yarkand²² ... Near that place, there is a house which, apparently since immemorial times, is ruined and buried.²³ Some merchants, hoping to find treasure, undertook with much trouble to excavate it, but found only the bodies of some cows which, on the first touch, crumbled into dust. On that occasion they found also the above mentioned book."

(v) The above narrated particulars of the excavation of the "house," or *stūpa*, in which the Weber Manuscripts were found, Mr. Weber had from a letter written in Urdū, which was interpreted to him by the person who delivered the manuscripts to him. This appears from another letter addressed to me by Mr. Weber from Leh on the 29th July 1892. In it, he wrote that the book had been no more than three days in his hands before he transmitted it to me. He, then, continued as follows (translated from the German original):—

"As I received the book through an intermediary, the latter could not furnish me with exact information. He showed me a letter in Urdū (which, however, I could not read) written by the finder of the book, an Afghan merchant, in which the find-place and everything that I reported in my previous letter was stated. The people knew that I collect Tibetan objects of every kind, and it was for that reason that the book was brought to me."

(vi) The identity of the "intermediary (Munshi Ahmad Din), and the "Afghan merchant" (Dildār Khān), mentioned in the preceding quotation, is disclosed in a letter written by Sir George Macartney, on the 12th October 1896 from Kāshgar, to Lieut-Colonel Sir A. C. Talbot, K. C. I. E., then British Resident in Kashmir. That letter was sent together with the Macartney Manuscripts, the acquisition of a portion of which is explained in it as follows:²⁴

"This is a manuscript, presented by Dildār Khān, an Afghan merchant in Yarkand. It appears that when the Bower MS. was found in Kuchar, two others were at the same time and under the same circumstances discovered.²⁵ Dildār Khān obtained possession of the latter, and took them to Leh in 1891.²⁶

²¹ The reference, of course, is to the Bower Manuscript, which, owing to a misapprehension, Mr. Weber at that time believed to have been discovered in Kugiar (Kokyar), about 60 miles south of Yarkand, at 77° 12' E. Long., and 37° 25' N. Lat. See the Map in the *Geographical Journal*, July 1893. The misapprehension was subsequently corrected in a letter addressed to me by the Rev. F. B. Shawe from Leh, on the 15th September 1893. See Sir Charles Elliott's Annual Address to the Asiatic Society of Bengal, 1894; p. 33; also *Journal ASB.*, Vol. LXII (1893), pp. 1 and 2; and *ibid.*, Vol. LXVI (1897) p. 229.

²² The German original has *versunkenes und verschüttetes Haus*. The word "house" evidently represents the Urdū *ghar* of Mr. Weber's native informant. That word appears to be usually employed by the natives of Turkestan to indicate a *stūpa*; See, e.g., Sir Aurel Stein's *Ancient Khotan*, Vol. I., p. 483.

²³ See *Journal As. Soc. Beng.*, Vol. LXVI (1897), p. 27.

²⁴ This statement, as will be shown in the sequel, is a misapprehension. The "two others" are rather "two bundles of manuscripts" (see No. x), and they were found at a place and at a time different from those of the discovery of the Bower Manuscript.

²⁵ This should be 1892. See Nos. iv. and v.

He gave one to Munshi Ahmad Din, who in his turn presented his acquisition to Mr. Weber, Moravian Missionary. Hence the origin of the Weber Manuscripts. The other manuscript in Dildār Khān's possession was taken by him to India, and left with a friend of his in Aligarh, a certain Faiz Mu'ammed Khān. Dildār Khān brought it back to Turkestan last year [1895], and presented it to me."

(vii) From the preceding quotation it is seen that the "intermediary," from whom Mr. Weber received his manuscripts, was Munshi Ahmad Din, and that the "Afghan merchant," who sent them, through the intermediary, to Mr. Weber, was Dildār Khān of Yarkand. This man, however, was not the writer of the Urdū letter to which Mr. Weber (in No. v) refers. That letter must have been one written to Dildār Khān by his elder brother, Ghulām Qādir Khān, who sent the manuscripts, a portion of which found its way to Mr. Weber, through Munshi Ahmad Din. This appears from an account, which was procured for me by Sir George Macartney from Dildār Khān himself in January 1898. That account was written in Urdū and may be translated as follows²⁰:

"I heard from my brother Ghulām Qādir Khān that there was a dome-like tower near Kuchar at the foot of a mountain. Some people said that there was treasure in it; it must be searched out. Accordingly, some people, making a hole in the tower, began to excavate it, when inside they found it to be a house containing a compartment (*ghar khānadār*),²¹ and in it a cow and two foxes standing. On touching them with the hand the cow and foxes fell to the ground as if they were dust. In that place those two books²² were found enclosed in wooden boards. Also there is in that place a wall made as if of stone (*diwār sang ke munāfiq*), and upon it something is written in characters not known. It is said that a few years ago an English gentleman²³ went there, and having visited the place, came away. Nothing more is known."

Plainly this account is identical with that given by Mr. Weber (see No. iv), as interpreted to him from an Urdū letter. It shows that the letter was written by Ghulām Qādir Khān, an Afghan merchant resident in Kuchar, to his brother Dildār Khān, a merchant residing in Yarkand. It was this letter, in the possession of Dildār Khān, on which the latter based the account, above-quoted, which he gave to Sir George Macartney for transmission to me. The importance of these facts lies in this that we see that the earliest statement concerning the locality and the circumstances of the find of the Weber Manuscripts and Macartney Manuscripts was made immediately after the discovery, in 1891, by a native informant in a letter written for the information, not of any European enquirer, but of his own brother. Native informants, in their dealings with Europeans, are, no doubt, not reliable; but in the circumstances of the present case,—a native merchant dealing with another native merchant, his own brother, with common interests,—there seems to be no good reason to distrust the substantial accuracy of the account of the discovery.

(viii) A little later in the same year, in November 1898, another more detailed account, in Urdū, of the discovery and dispersion of the Weber and Macartney Manuscripts was procured for me by Captain (now Lieut-Colonel) S. H. Godfrey, C. I. E., from Munshi Ahmad Din. In all probability it was based on information supplied to the Munshi by Dildār Khān. The main points in it are the following²⁴:

²⁰ See my *Report on the British Collection of Central Asian Antiquities*, Part I, *Introd.*, p. xi.

²¹ In my *Report* (see preceding note) this phrase is translated "spacious," but the literal, and more correct, translation is as in the text above. As to the term "house," see *ante*, Note 22. See also below, p. ix. M. Berezovski's account.

²² Or rather "bundles of manuscripts." See below No. x.

²³ This is a confused reference to Lieutenant Bower, who went to Qum Turā, but not to Qutluq Urdū.

²⁴ See my *Report on the British Collection of Central Asian Antiquities*, Part I, *Introd.*, pp. x and xi. There explanatory statements of my own are interspersed. See also *Proceedings*, ASB., 1898, pp. 63, 64.

"Some years ago some people of Kuchar undertook to make an excavation of an ancient tower. Their object in digging into the tower was to find treasure, as it was well known that in the time of Yakûb Beg much gold had been discovered in such ancient buildings. Whether or not they found any treasure is not known; but what they did find was a number of manuscripts and detached papers, together with the bodies of a cow and two foxes standing. The manuscript books and papers were taken to the house of the chief Qâdî, of the town, where a couple of days afterwards they were seen by Hâjî Ghulâm Qâdîr heaped up in a corner, there being a big basket (*sabud*) full of them. On enquiry, having been told the whole story by the Qâdî, he brought away a few of them. Of these he gave one to Lieutenant Bower,²¹ while he sent the others to his younger brother Dildâr Khân in Yarkand. These the latter took with him to Lâh in 1891.²² Here he gave one portion to Ahmad Dîn, who in his turn gave it to Mr. Weber. The other portion Dildâr Khân took with him to India, where he left it with a friend in Aligarh. On a subsequent visit to India, in 1895, he re-took it from his friend, and brought it back to Turkestan, and presented it to Mr. Macartney. What became of the rest of the manuscripts in the house of the Qâdî is not exactly known. It is probable that Andijani merchants in Kuchar, who are Russian subjects, got hold of some of them, and gave them to Mr. Petrovsky, the Russian Consul General in Kâshgar.²³ As late as 1894, ten manuscripts were reported by Dildâr Khân, on the information of his brother in Kuchar, to be in the possession of a certain Yusûf Beg. Unfortunately the negotiations set on foot by Mr. Macartney for the purchase of these manuscripts fell through, owing to the Beg's denial of possession from fear of the Chinese authorities. It is believed that subsequently Mr. Petrovski succeeded in purchasing them."²⁴

(ix) With regard to the ten manuscripts referred to at the end of the preceding account of Munshi Ahmad Dîn, I received, in response to a request for further information, in November 1895, from Sir George Macartney the translation of a letter of the Chinese Amban of Kuchar, dated on the previous 7th December 1894, which runs as follows²⁵:

"I have received your letter desiring me to enquire whether there are any sacred Tibetan manuscripts in the family of Timur Beg. I lost no time in summoning him. He stated that he had no such manuscripts, but that some people had several years ago [*i. e.*, in 1891] dug some out from a big mound situated at the west of the city [of Kuchar], and almost 5 *li* [about one mile] from it, and as this took place a long time ago, the documents had either been sold or burnt. I also went in person to make an inspection of the mound which was about 10 *changs* [approximately 100 feet] in height, and about the same dimension in circumference. As people had already been digging there, a cavity was seen which however had fallen in. I hired 25 men to dig under proper supervision. After two months' work, they dug out only a parcel of torn paper, and torn leaves with writing on them. I now forward this to you. If afterwards I discover any person possessing such manuscripts, I shall again communicate with you."

(x) Subsequently the oasis of Kuchar was visited by a series of expeditions—Japanese, German, Russian, and French (see *ante*, p. iii)—for the purpose of exploring all the sites of archaeological interest situated in it. It was the object of the last expedition, the French, led by M. Pelliot, more especially to explore systematically the

²¹ This is a total misconception. Lieutenant Bower, as the latter states himself (see No. iii), received his manuscripts, not from an Afghan, but from a Turki, and as will be shown in the sequel, he received it one year earlier than the occasion here referred to. The statement, it should be noted, appears only in an account of 1898, and is due to a confusion of the Munshi himself. The genuine early and contemporary native tradition knows nothing of it. For an explanation of the facts, see below p. xli.

²² This should be 1892. See *ante*, note 25.

²³ That this really was the case is proved by the fact that among the manuscripts which Mr. Petrovski sent to the Imperial Library in St. Petersburg during the autumn and winter of 1892-3, there are portions of at least two manuscripts, of which other portions are included in the Weber and Macartney Manuscripts. See *Journal, As. Soc. Beng.*, Vol. LXVI (1897), pp. 241-2, also my *Report*, Part II, in Extra Number to *Journal, ASB.*, Vol. LXX (1901), pp. 16-17 (No. 2, Pothi); also *Vienna Oriental Journal*, Vol. VII, p. 273.

²⁴ These, of course, were not included in the Petrovski Collection of 1892-3 referred to in the preceding note.

²⁵ See *Journal, As. Soc. Beng.*, Vol. LXVI (1897), pp. 213-4.

sites reputed to be those from which the Bower, Weber, Macartney, and Petrovski Manuscripts had been extracted by the native treasure seekers. The only report on the subject, however, which as yet is available is contained in a letter of M. Pelliot, dated the 29th January 1907, which was read by M. A. Barth to the French Académie des Inscriptions & Belles Lettres in their séance of the 22nd March 1907, and which is published in the *Comptes Rendus*, pp. 162 ff. It gives an account of all the information which at present, and at this distance of time, appears to be obtainable at the locality of the discoveries itself. M. Pelliot relates (*loc. cit.* p. 164) that on the 21st January 1907 he went to visit the *Ming-oi* or rock-cut caves of Qizil to the north-west of Kuchar (see the Sketch Map). On his return he took the more difficult hill route, where he met with a well-educated Turki, named Timur Beg, who was in charge of the copper mines of Kuchar. From this man M. Pelliot elicited some interesting information regarding the discovery of the manuscripts in question. His letter, translated from the original French, proceeds as follows (p. 165):—

"From the time of my arrival at Kuchar, Berezovski had spoken to me about 250 bundles of Hindû manuscripts which had been found about a score of years ago, in the ruined grand stûpa of Qutluq Urdâ, a little to the west of Kuchar. These books, Berezovski told me, had been distributed in a series of small receptacles built into the very brick core of the stûpa; and some of them still remained in a certain Turki family which refused to sell them. Berezovski had this information from "his man" as he always called him, a shady person, treasure-seeker and sorcerer on occasion, well acquainted with the country, but a liar without an equal. I have caught him *in flagrante delicto* on several occasions, and as the places which were shown to me as the ancient receptacles of the book were little capable of ever having contained anything, I was convinced that, even if the discovery was true, at all events the informant, Mir Sherif, had not been an eye-witness of it.

"Until my meeting with Timur Beg it had seemed to me little probable that we should ever hear much more about the discovery. But while I was conversing with him, he spoke to me, of his own accord, of books which had been found some time ago by treasure seekers at Qutluq Urdâ. There were about 25 bundles, each between two wooden boards, the whole in an unknown script, measuring about 0.30 by 0.10 metre; also one very large book was found in a bag. The treasure seekers, not knowing what to do with their booty, offered it to Timur Beg's uncle, Qhanizat Khoja, who was the headman of that part of the village. He, however, did not attach to the books any greater value, and thus little by little, being torn by the children, and exposed to neglect, they all got lost. No one suspected that these old papers could possess any value.

"The idea occurred to me that possibly the Bower Manuscript was one of the manuscripts of Qhanizat Khân. For this, however, I had no proof, nor even any serious indications. In fact, as I should explain, Bower was told that his manuscript had been found in one of the caves of the *Ming-oi* of Qum Turâ. This in itself is quite possible; for though, as a rule, the *Ming-oi*s have yielded only detached leaves, the Germans are said to have tumbled at Qizil on an almost complete text.²⁶ But in any case, it appeared to me very little probable that the particular grotto which had been indicated to Bower, and which, in the course of centuries, had been but little encroached upon by the sands, had yielded any manuscript. The find, if it was made at all in Qum Turâ, must have taken place in another grotto.

"But there is another possible solution. I asked Timur Beg whether he ever heard of any of the bundles having been sold to a foreigner. He replied that he had heard say that one of the servants of his uncle had once taken one or two bundles and sold them to the "Afghan" Qâdir Khân, who had resold them to an Englishman.²⁷ There is still, at the present day, at Kuchar a Qâdir Khân who, as a fact, is an

²⁶ Dr. A. von Le Coq informs me (letter 29th October 1909) that it was a well preserved *pûthi*, tied up between two wooden boards, consisting of a large number (about 60) of leaves in Brâhmî script, and Sanskrit language; also one leaf in Brâhmî script and an unknown language; measuring about 22x7 cm. It is shown in figs. 6. and 7, Chapter II, pp. xvii and xviii.

²⁷ This is a vague reference; but it cannot refer to Lieut. Bower, who is out of the question, but to Mr. Weber, or to Sir George Macartney, or possibly to both. See below, page xv.

English subject. People call him an Afghan, just as they call the Aqsakal an "Afghan," because he comes from the region of Peshawar. Is he the same man? I do not know; for, as I believe I had understood from Timur Beg that the Qâdir Khân in question was dead. If the truth of his story can be fully relied on, it would seem to afford us glimpses of the Bower MS. I am rather disposed to admit that solution, seeing that the manuscripts of Qutluq Urdâ are, on the whole, the only ones regarding which I have hitherto obtained some little more precise information. On the other hand, if Qâdir Khân owed his manuscripts to the theft of a servant, he would only too naturally prefer to attribute them to another source, and, from this point of view, the *Ming-oi* of Qum Turâ would be just what he required.

"But it is also possible that we have here a false tradition, that the sale to an Englishman is an invented story, and that the reference is perhaps rather to a text which Petrovski acquired and which may now be in St. Petersburg. We must not forget that in consequence of Bower's discovery, Petrovski and Macartney sent men into the country, and their enquiries, by arousing the attention of the natives, would tend to originate legends. All that I wish to say is that the traditional version of the discovery of the Bower MS. can be received only with a good deal of reserve, and that possibly the manuscript came from Qutluq Urdâ."

(xi) In a subsequent English letter, dated Peking, 10th July 1909, addressed to me in response to a request for further information, M. Pelliot wrote as follows:—

"Unfortunately I have not come across any new date since the time I wrote to the Academy the letter you allude to. [See No. x.] Qoutlouq Urdâ is a ruined stûpa, lying about one mile to the west of the town of Kuchar, while the Qoum Tourâ *Ming-oi* is about 12 miles further west, on the left bank of the Mouzert Daria I am quite at a loss to decide between the two versions I have collected for the discovery of the Bower Manuscript. It may just as well be true that they were unearthed in the cave Bower was shown to. But it seems to be a well-established fact that an important manuscript-find was made in the Qoutlouq Urdâ stûpa some time before the arrival of Captain Bower. I really cannot say anything more."

(xii) M. Pelliot's concluding remark in the preceding No. xi regarding the "well-established fact of an important manuscript find in the Qutluq Urdâ stûpa" is confirmed in a letter addressed to me by Dr. A. von Le Coq, dated the 9th October 1909, from which the following, translated from the German, is an extract:—

"That a very considerable find of manuscripts was made in a stûpa in Kuchar appears to me to follow from the narration of the Russian (Andijani) Aqsakal in Kuchar, Chal Muhammad. He showed me the pyramid-like structure near the town, north of the road to Qum Turâ, from which, some 20 years ago, some people extracted the largest find of manuscripts, which, so far as I know, had ever been made. Possibly the Bower manuscript was part of that find. To native statements, as a rule, no weight attaches; but this man was the most honest of all whom I came to know in that place."

(xiii) From the careful survey made by the French expedition it appears, as I learn from M. A. Barth (letters of the 3rd June and 22nd October 1909), that there are four stûpas in the neighbourhood of the *Ming-oi* of Qum Turâ. Their distribution is shown in the following extract from a letter to me of Sir Aurel Stein, dated the 3rd December 1909:

"The Qum Turâ site, as far as I saw it on a gloomy winter day, consists of:

- (a) the caves on the left river bank, in two groups, close together, cut into the barren outer hills;
- (b) a Kone Shahr, or "ancient city," about 1½ miles to the south, near the right bank of the river containing the ruins of a large monastery with one stûpa in the centre, and another big stûpa ruin outside it to the north;
- (c) the Seral Tam ruin, about 1½ miles to the south-west of (b), on the left bank of the river, consisting of a massive enclosing wall about 55 yards square with a ruined stûpa in the centre, and a fairly well preserved Qumbâz in one corner.

"In addition I noticed some ruins, probably of temples, about 150 feet above the caves on a ridge of the left bank. These I had no time to visit, and hence cannot say whether stûpas could be distinguished among them."

That there was, however, a large stûpa among them, the fourth of the list, appears from a letter of Dr. A. von Le Coq, dated the 24th October 1909 :

"Stûpas are there . . . Bower's statements are likely to be correct ; all the stûpas are more or less ruined. Qum Turâ, or 'the (old) building in the sand' is a modern small settlement which takes its name from an old (Buddhist) temple which stands on a gravelly alluvial flat (apparently Saraj Tam) on the bank of the river where it debouches from the valley. On the height of the eastern (left) bank there stands, unless I am much mistaken, the principal stûpa. In order to get to the Ming-oï one has to ride in the bed of the river (or on the ice). I should say the distance is about half a kilometer."

In a later communication from Dr. von Le Coq, on the 16th November 1909, the following distances are given :

"The distance from Qum Turâ to the Turâ (or the ruined building) on the ridge is about five kilometer (or about three miles). We rode at the time over the ice : in the summer the distance may be a little greater. From the Turâ to the beginning of the caves I should say the distance is about 500 meters (or about 500 yards, see No. ii)."

On the basis of the above-given extracts from letters as illustrated by the Sketch Map, the Topographical Plan, and the View of Qum Turâ, an attempt may now be made to determine what, in all probability, would seem to have been the true find-place of the Bower Manuscript. In the first place, two misapprehensions must be removed which hitherto have prevented its recognition. It will be seen from the extracts Nos. x, xi and xii, that according to an admittedly well established native tradition, current in Kuchar, a large find of manuscripts was made in the Qutluq Urdâ stûpa; and it is there suggested that the Bower Manuscript may have formed part of that find. Again, in Nos. x and xi, a rival version of the tradition is referred to, according to which the Bower Manuscript was found in one of the caves of the Ming-oï of Qum Turâ. Now this rival version is not a native Kuchari tradition at all, but merely a mistaken view originally started by Bühler in his contributions to the *Vienna Oriental Journal*, Vol. V (1891), pp. 103 and 302, in which after having read Lieutenant Bower's note (quoted in No. i), Bühler announced the discovery of the Bower manuscript to the learned world of Europe, as having been "obtained by Lieutenant Bower from the ruins of the ancient underground city of Ming-oï near Kuchar in Kashgaria." On referring to that note, it will be seen that Lieutenant Bower made no such statement. He says explicitly that the manuscript was "dug out of the foot of one of the curious old erections" which stood "just outside (or "close to" as in No. iii) the subterranean city." Bühler's misrepresentation is, in the circumstances, easily enough explainable, but it suggested what Lieutenant Bower explicitly states in his letter (see No. ii) to be "a total misconception of the facts"; and unfortunately it has had the effect of obscuring the real facts to all subsequent investigators.

The correction of Bühler's misconception practically disposes also of the other misapprehension regarding the Qutluq Urdâ stûpa. As may be seen from Nos. ix, xi, and xii, that stûpa is situated close to the town of Kuchar itself, that is to say, only about one mile" (No. xi), or "about 5 li" (No. ix) to the west of that town, and north of the road to Qum Turâ; while the stûpa, from which the Bower manuscript was extracted, stands close to, that is to say "about 500 yards" (No. ii), or "about half a kilometer" (No. xiii) from the Ming-oï of Qum Turâ, and that Ming-oï itself is situated, according to Lieutenant Bower, "about 16 miles from Kuchar" (No. i), or according to M. Pelliot, "about 12 miles further west" (No. xi) from the Qutluq Urdâ stûpa, that is to say, about 13 miles from the town of Kuchar. Clearly the stûpa of the Bower manuscript, and the stûpa of Qutluq Urdâ from which the Weber, Macartney and Petrovski manuscripts were obtained, are two entirely distinct structures.

But the extracts, above given, furnish us with some further corroborative evidence. Lieutenant Bower tells us that his stûpa (*i.e.*, the stûpa close to the *Ming-oi* of Qum Turâ) was "about 50 feet high" (No. iii). On the other hand, the stûpa of Qutluq Urdâ, which is described by M. Pelliot as a "grand stûpa" (No. x), is stated by the Chinese Amban, who visited it at the end of the year 1894, to have been "about 10 *chang* (or about 100 feet) in height, and about the same dimension in circumference" (No. ix). This "grand stûpa," therefore, in those days, was about twice the size of the stûpa of Qum Turâ. Again the stûpa of Qum Turâ, according to both Lieutenant Bower and Dr. von Le Coq, stands right upon the (eastern or left) bank of the river Shâhyâr (Nos. iii, xiii), or Muzart as it is also called (No. xi), while the stûpa of Qutluq Urdâ is described by Dildâr Khân, in his Urdâ account, as standing "at the foot of a mountain" (No. vii), the reference apparently being to the "low barren hills," alluded to by Lieutenant Bower in the account of his march to Qum Turâ (No. ii). The topographical position of the two stûpas, therefore, is quite different. There is a further difference in the dates of the opening of the two stûpas. Lieutenant Bower obtained his manuscript early in 1890. Therefore the stûpa, in which it was found, was opened, at least, as early as that year. In fact, as will be shown presently, it appears to have been opened only a few days previously. On the other hand, the Qutluq Urdâ stûpa must have been opened in 1891, that is, about one year later than the Qum Turâ stûpa. For when Mr. Weber obtained his manuscripts in June 1892, he was told that they had been found "the year before" (Nos. iv and v), that is to say, in 1891. There was, therefore, an interval of about one year between the openings of the two stûpas. Between the year 1891 and the date of M. Pelliot's visit in 1907, there is an interval of 16 years. The native tradition, at the time of his visit to Kuchar, made the interval to be "about a score of years" (No. x). The same statement, "some 20 years ago" was made about the same time to Dr. von Le Coq (No. xiii). As to this discrepancy, the contemporary statement, made to Mr. Weber, is obviously more trustworthy than the vague statement, in round numbers, of a much later oral tradition, which had no longer an exact recollection of the date, and which, in any case, would be inconsistent with either date, 1890 or 1891. M. Pelliot's remark that the find in the stûpa was made "some time before the arrival of Captain Bower" (No. xi) would seem to be merely a deduction from the statement "about a score of years" in the native tradition, seeing that the latter would work out about the year 1887, or about four years earlier than Lieutenant Bower's visit. The tradition itself knows nothing about Lieutenant Bower. Lastly, there is a difference between the numbers of manuscripts which are reported to have been found in the two stûpas respectively. The Bower Manuscript is the solitary manuscript which is said to have been found in the stûpa at Qum Turâ (No. iii). On the other hand, with regard to the stûpa of Qutluq Urdâ the uniform native tradition is that a large number of manuscripts were dug out from it (Nos. viii, xii), the number being sometimes given as 25, and at other times (no doubt, exaggeratedly) even as 250 (No. x).

The facts above set out make it quite certain that the Bower Manuscript was not found in the stûpa of Qutluq Urdâ, about one mile from Kuchar, but in a stûpa close to the *Ming-oi* of Qum Turâ about 13 (or 16) miles from that town. But further, it seems practically certain that it was dug out from the stûpa, on the ridge above the caves, at the spot marked C on the Topographical Plan. For this stûpa alone can be said to be "close

to" the *Ming-oi* or "just outside the subterranean city" (No. i), the other three stūpas at Kone Shahr and Sarai Tam being about $1\frac{1}{2}$ to $2\frac{1}{2}$ miles distant from the *Ming-oi*.

Having determined what in all probability is the true find-place of the Bower Manuscript, we may now attempt to determine the exact time when it was discovered by the native treasure-seekers of Kuchar. For guidance we have the following data, supplied by Captain Bower in the report of his travels in the *Geographical Journal* of the Royal Geographical Society, Vol. V (1895), pp. 252 ff., and illustrated by the annexed Sketch Map. At Kuchar, Captain Bower tells us, he halted several days, and while staying there, he received, as related in Extract No. iii, the visits of a Turki who gave him the manuscript and guided him to its find-place, the stūpa close to the main group of caves of the *Ming-oi* of Qum Turā. He started on this expedition about midnight of the day on which the manuscript was brought to him (Nos. i, iii). He reached the *Ming-oi* at day-break (say, about 5 A. M., Nos. ii, iii) of the following day. Here he spent some hours in examining the stūpa of the manuscript, and some of the adjacent caves of the *Ming-oi*, of the appearance of which the accompanying photographs, (Figs. 3 and 4), supplied by the kindness of M. Pelliot and Dr. von Le Coq, give us some idea. Having done so, Lieutenant Bower went on to Faizābād, where he spent the night. The next day, i. e., the second day after leaving Kuchar, he marched down the banks of a canal to Charshamba Bazar, shooting on the way wild ducks that were on the canal.

On the same day, or the day after, he reached Shāhyār. On the 6th of March he left Shāhyār on his return journey to Kāshgar, which he reached on the 1st of April. These are the only two definite dates mentioned by Captain Bower in the recital of this part of his tour.

He does not say how long he stayed in Shāhyār, but as it was his second visit to the place, and as nothing that might have caused a longer detention is mentioned, it may be concluded that the 6th of March was the day after his arrival in Shāhyār from his visit to the *Ming-oi* of Qum Turā. On the basis of this count, it was the 2nd or 3rd of March, on which Lieutenant Bower received the manuscript, and on the midnight of which he started on his visit to the *Ming-oi*. Now Lieutenant Bower states (see No. ii) that the Turki, who brought the manuscript to him told him that he had dug it out "a few days previously," and that he "showed him where a hole had been *recently* excavated." It follows, therefore, that the discovery of the Bower Manuscript must have occurred a few days previous to the 2nd or 3rd of March, that is, on some day of the month of February of the year 1890.

Having passed in review the evidence for what is probably the true find-place of the Bower Manuscript, and for the exact time of its discovery, we may now proceed to sketch

briefly the course of events connected with the discoveries and vicissitudes of the manuscripts called after the names of Bower, Weber, Macartney and Petrovski, so far as they may be deduced by means of a careful comparison and co-ordination of the statements quoted in the preceding extracts. There are some minor discrepancies in them; but they do not affect the main lines of the story.

In February 1890, two Turkis of Kuchar, searching for treasure, dug into the stûpas which stand near the *Ming-oi*, or system of rock-cut grottos, of Qum Turâ. In one of the stûpas, they discovered the birch-bark manuscript, which one of the two men on the 2nd or 3rd of March 1890, sold to Lieutenant Bower, and which is now known as the Bower Manuscript (Nos. i-iii). The partial success of this enterprise apparently suggested to a number of men of Kuchar the attempt to break into the neighbouring great stûpa of Qutluq Urdâ, which by its much larger size gave promise of the yield of much more valuable booty (No. vii). This enterprise, it appears, was executed some time in the early part of 1891. The story of the men as to what they found in the interior chamber of the stûpa seems never to have varied in its main lines from that year down to 1907, when it was repeated to M. Pelliot (No. iv of 1892, Nos. vii and viii of 1898, No. x of 1907). Nor is there any good reason to discredit it. Interior relic chambers do not uncommonly occur in stûpas of Eastern Turkestan, as has been observed by Sir Aurel Stein in his *Ancient Khotan*, Vol. I, pp. 82 ff. Such an interior chamber may be clearly seen, e.g., in the subjoined view of the stûpa at Subashi (Fig. 5) to the east of Kuchar (see Sketch Map) from a photograph taken by Sir Aurel Stein. A similar interior relic chamber in the Mauri Tim Stûpa, near Khânui, is shown in Sir Aurel Stein's *Ancient Khotan*, p. 74, fig. 13. However, the only point of interest in the men's story is that they found a large number of manuscripts, enough to fill a "big basket" (No. viii). These manuscripts are said to have consisted of twenty-five "bundles," that is, Indian *pôphis* (see Fig. 6, p. xvii), each tied between two wooden boards, and written in a script unknown to the finders (No. x), that is, in a Sanskritic, or Brahmi, script. They were taken to the house of the Qâşî, or headman, of Kuchar (Nos. vii, x), a Turki, called *Qhanizat*, *Khân*, the uncle of a man called Timur Beg²⁸ (Nos. ix, x). In his house they lay about, uncared for, and suffering much injury at the hands of the children. In the meantime, Lieutenant Bower, on his return journey to India, having shown his acquisition to Messrs. Macartney and Petrovski in Kâshgar, and to Mr. Weber in Leh, these gentlemen had instructed their native acquaintances, or Aqsaqâls, to keep an outlook for similar discoveries with a view to securing them (Nos. iv, v, x). The presence of the "bundles" of manuscripts in the house of the Qâşî soon became known generally in Kuchar. Among others the British and Russian Aqsaqâls

²⁸ In No. viii the owner is called Yaqûb Beg. If this is not a mere error, Yaqûb Beg may have been a son of *Qhanizat Khân*, who may have been dead by that time.



Fig. 3:—View of a portion of the Ming-oi of Qum-Turk.



Fig. 4:—View of the river Shihyar from the window of a cave of the Ming-oi of Qum-Turk.



Fig. 5:—View of shuin at Subroshi.

in that town came to hear of it, and at once went to the Qâsi's house to secure some portion of the find for their patrons. The British Agent, an Afghan merchant residing in Kuchar, named Qâdir Khân, obtained, only a couple of days after the manuscripts had been brought to the house of the Qâsi, a few of them in two bundles, no doubt, by means of a gratuity given to the servant of the Qâsi (Nos. viii, x). The manuscripts thus obtained he transmitted to his brother, Dildâr Khân, another merchant, acting as the British Aqsaqâl in Yarkand. The latter sold, in the following year, 1892, one of the two bundles to Mr. Weber, through Munshi Ahmad Dîn. This bundle has since been known as the Weber Manuscripts. The other bundle Dildâr Khân carried to India, no doubt with the object of selling it there, but failing therein, he brought it back, in 1895, and disposed of it to Sir George Macartney in Kâshgar (Nos. vi, viii); and it has since been known as the Macartney Manuscripts. Similarly, the Russian Aqsaqâl in Kuchar, an Andijani merchant (perhaps the man Chal Muhammad who was Dr. von Le Coq's informant; see No. xii), secured another bundle of more or less injured manuscripts from the Qâsi's house, which he transmitted to Mr. Petrovski in Kâshgar, and which now form the Petrovski collection in St. Petersburg. As to what became of the remainder of the manuscripts in the house of the Qâsi, there is no certain information. The current opinion in Kuchar appears to be that, utterly neglected as they were in the house of the Qâsi, they gradually got lost or destroyed. Some of them may, in the form of detached leaves, have subsequently found their way into the hands of Europeans; others may possibly, as Mr. Berezovski seems to believe (No. x), still yield to persevering search. To the former class may possibly belong some of the detached leaves, which were given to Captain Godfrey in 1895 apparently by some Yarkand traders, and which are said to have been "dug up near some old buried city in the vicinity of Kuchar." They belong to the collection which now bears the name of the Godfrey Manuscripts.²⁹

The general truth of the native tradition respecting the condition of the manuscripts at the time of their discovery, and their treatment afterwards in the house of the Qâsi, is fully confirmed by the appearance of the Weber, Macartney and Petrovski Manuscripts at the time of their reception. At the latter date, they consisted of more or less disorderly bundles of damaged manuscripts in which a number of leaves of different manuscripts were mixed up. Among the Weber and Macartney Manuscripts there actually were portions of manuscripts of which other portions are among the Petrovski Manuscripts.³⁰ This strikingly illustrates the ignorant neglect and careless treatment to which, according to Timur Beg's story (see No. x), the manuscripts were exposed in the house of his uncle. According to that story, in the original condition in which they were found, they appear

²⁹ See *Journal, Asiatic Society of Bengal*, Vol. LXVI (1897), Part I, p. 14, and Plates II and III.

³⁰ See the description of *paht*, No. 2 of set I, in my *Report on the British Collection of Central-Asian Antiquities*, Part II, page 16; also *ante*, footnote 33, p. viii.

to have been in more or less good order, each manuscript being tied up, in the ordinary fashion of an Indian *pôlî*, between two wooden boards (see No. x, also No. vii). The condition, in which probably they were found, may be seen from the photographs (Figs. 6 and 7, pp. xvii and xviii) of a manuscript, which was found by Dr. A. von Le Coq in a grotto of the *Ming-oi* of Qizil. As a matter of fact, among the Macartney Manuscripts both boards of a manuscript were still preserved, though the manuscript itself was defective. Also the bundle of Weber manuscripts contained two single boards of different sizes, belonging to two different manuscripts, which manuscripts themselves were defective both in the size and number of their leaves.⁴¹ It is probable that at the time these two manuscripts were found, they as well as their boards were in good order, and that they got into their present defective condition during their sojourn in the house of the Qâst. Similarly the Bower manuscript was found enclosed between two wooden boards (see Chapter II). Again, according to the native tradition reported to M. Pelliot (No. x), the dimension of the manuscripts was about $11\frac{1}{2}$ by 4 inches (0'30 sur 0'10 metre). As a matter of fact, the Weber and Macartney Manuscripts, in their original condition, measured roughly from $5\frac{1}{2}$ to $10\frac{1}{2}$ inches in length, and from $2\frac{1}{2}$ to $4\frac{1}{2}$ inches in breadth.⁴² This is as near to the traditional statement as, in the circumstances of the case, we can reasonably expect it to be.

⁴¹ See the description in the Journal, Asiatic Society of Beng. Vol. LXII (1893), Part 2, pp. 2, 3, 9, 32, and Vol. LXX (1901), Extra Number, pp. 2, 16.

⁴² See *ibidem* Vol. LXII, pp. 9 ff., Nos. 1, 2, 5, 6, 7, 9; also Vol. LXX, p. 18, No. 7.

CHAPTER II.

DESCRIPTION OF THE BOWER MANUSCRIPT.

The term "Bower Manuscript" is not strictly correct. As will be seen from the sequel, the object in question is not really a single manuscript, but, in point of size, rather a combination of two manuscripts, a larger and a smaller. The larger manuscript itself, moreover, in point of subject matter, is a complex of six smaller manuscripts, the distinction of which from one another is indicated also by their separate pagination. The Bower Manuscript, therefore, in reality is a collection of seven distinct manuscripts, or it may be called a collective manuscript of seven parts. The latter is the terminology adopted in the present edition; that is, Parts I-III, IV, V and VII, constitute the larger manuscript, while the smaller manuscript consists of Part VI.

The external form of the collective Bower Manuscript is that of the Indian *pôthi*.⁴³ A *pôthi* consists of a number of leaves, of a practically uniform oblong shape, generally enclosed between two wooden boards, and the whole held in position, or "bound," by a string which passes through a hole drilled through the whole pile. Unfortunately no photograph was ever taken of the Bower Manuscript in the condition in which it was found, or in which it was made over by the finder to Lieutenant Bower. But an idea of its appearance may be formed from Fig. 6, which shows a paper *pôthi*, tied up with a string between its wooden boards, exactly as it was found by Professor Grünwedel's expedition in a cave temple of the *Mingoi* of Qizil.⁴⁴ In Fig. 7, the same *pôthi* is shown untied and unfolded.

The leaves of the Bower Manuscript are cut from the bark, or periderm, of the birch tree; those of a modern Indian *pôthi* are, as a rule, of paper.⁴⁵ Before the introduction of paper into India, which event probably coincided with the advent of the Muhammadans, the writing material for the purpose of literature was palm-leaf or birch-bark.⁴⁶ Palm-leaf must have been the original material of an Indian *pôthi*; for it was the shape of the palm-leaf which determined the narrow oblong shape of the leaves of the *pôthi*. The bark of the birch tree may be obtained in very large strips, about a yard long and eight inches broad. There is no apparent reason why these strips should have been cut into narrow oblong pieces in order to be used as the writing material of books. On the other hand, from the long narrow segments of the leaf of a palm tree none but strips, at most about a yard long and three inches broad, could be cut. These, if used as writing material, necessarily determined the narrow oblong shape of the leaves of the *pôthi*. The birch tree (*Betula utilis*), the "Himalayan Birch," is indigenous in the extreme North of India (e.g., in Kashmir), while the palm tree (Talipat, *Corypha umbraculifera*) is peculiar to the South of India. Hence the fashion of the Indian *pôthi* must have originated in the South of

⁴³ From the Sanskrit *pustakā*, or rather *pustikā*, book, applied at the present day to any book, written or lithographed or printed, Indian or European.

⁴⁴ See Sketch Map to Chapter I.

⁴⁵ Occasionally they are still made of palm-leaf, in Bihar, Orissa, and Southern India.

⁴⁶ On the local distribution, and other particulars, of these two materials, see my Epigraphical Note, in the *Journal of the Asiatic Society of Bengal*, Vol. LXIX (1900), Part I, pp. 93 ff.

India, while the original "book" of the North of India must have been written on large strips of birch-bark. As a fact the oldest Indian "book" on birch-bark, the Dutreuil de Rhins Manuscript, which probably dates from near the beginning of our era, is written on such large strips. The Southern Indian fashion of the *pôthi* is, in many ways, more convenient for literary use; and as evidenced by the Bower Manuscript and by the other birch-bark manuscripts which have been discovered in Eastern Turkestan (see Chapter IV), it must, at a very early period, have made its way into Northern India, whence finally it was carried, by the spread of Buddhism, to Eastern Turkestan, nearly all the indigenous paper manuscripts of which exhibit the narrow oblong shape of the Indian *pôthi*. At a much later period, probably after the advent of Islam and its western culture, the fashion arose, within the birch-bark area of Northern India to use birch-bark in imitation of paper, and to give to birch-bark books the shape of the paper books of the West. The Indian *pôthi* shape of the birch-bark Bower Manuscript, therefore, is corroborative evidence of the great antiquity of that manuscript,—a point which will be discussed in detail in Chapter III.

The birch-bark leaves of the Bower Manuscript, as already intimated, are of two different sizes. The leaves of Parts I-III, IV, V and VII are considerably larger, both in length and breadth, than those of Part VI. The former measure about $11\frac{1}{2}$ by $2\frac{1}{2}$ inches; the latter, about 9 by 2 inches. Besides the size of the leaves, there is another point which differentiates the two portions of the collective manuscript from each other. The birch bark of the larger portion is of a quality much inferior to that of the smaller portion (Part VI). The former is hard and brittle, and apt to break if roughly handled, while the latter is soft and tough, and can readily be bent. The difference may be due to the age of the tree from which the bark was taken, as well as to the thoroughness of the process (probably boiling in milk or water) by which the bark was prepared for the reception of writing. Moreover, some of the leaves used in the larger portion were in a defective condition at the time when they were inscribed, while the leaves of Part VI were, and are still, in perfect order. For example, in Part I a large portion in the upper right corner of the third folio (see Plate III), affecting no less than six lines, had broken away, before the leaf was inscribed; for nothing of the text is wanting. Similarly, in Part II, large holes had broken into folios 25 and 26 (Plates XXVII and XXVIII), before they were written on. On the other hand, the defects in folios 9 and 12 of the same Part (Plates XIV and XVII) only occurred after those leaves had been inscribed; for some portion of the text is lost. But there is also another cause to which the defective condition of the leaf is occasionally due, *viz.*, exfoliation. Birch-bark, as writing material, is of varying thickness, consisting of several layers of periderm of extreme tenuity, numbering from two to twelve, or even more;⁴⁷ one layer by itself would be too tenuous to be inscribed. When the bark is properly prepared, the process renders the natural adhesion of the layers more durable; but when it is imperfectly prepared, or when it is

⁴⁷ Thus, of the five folios of Part I, the first consists of two layers, the four others of four layers each (*Journal, As. Soc. Beng.*, Vol. LX, 1891, p. 136). Of the five folios of Part IV, the second has at least twelve, and the other, four layers each (*Indian Antiquary*, Vol. XXI, 1891, pp. 129, 130). Of the four folios of Part VI, the first has three layers, the third, six, and the two others, four each. Of course with good birch-bark it would not have been necessary to have a large number of layers to render the bark inscribable: it was the inferior quality of most of the bark which prevented a separation of the layers in unlacerated portions of sufficient dimensions to admit of being used as writing material (see *Journal, As. Soc. Beng.*, Vol. LX, 1891, Part I, p. 137).

taken from a too old tree, or from an unsuitable part of the tree, the surface layers are apt to flake off, when the bark becomes thoroughly dry. In that condition, a leaf is unsuitable for writing. This may be illustrated by the blank reverse of the fourth folio in Part IV (Plate XLI), which distinctly shows the surface in process of exfoliation; and it was, no doubt, for that reason that the scribe abstained from writing on it. For the same reason, apparently, the obverse of the fourth folio of Part V (Plate XLVI) was left blank.⁴⁸ On the other hand, occasionally exfoliation took place after the leaf had been inscribed. Thus on the left of the reverse side of the thirty-third folio (Plate XXXIV)⁴⁹ of Part II, about one-fourth of the surface layer has flaked off, carrying with it a large portion of the text; and the same injury has befallen a smaller portion of the reverse of the twenty-ninth folio (Plate XXXI). On the obverse side of the sixth folio of Part V we have another example of the same phenomenon; and in the case of folio 1 of Part VII (Plate LIII) the whole of the inscribed top layer of the obverse side has flaked off. In the third place, much of the bark, used in the larger portion, is full of faults in its texture. It appears to have been taken from an unsuitable part of the tree, producing a rough and knotty surface, unserviceable for writing. This may be seen by reference, e.g., to the reverses of the first folio of Part II (Plate VI) and the second folio of Part IV (Plate XXXIX), about one-half of which has been left blank. It is also illustrated by the fact that sometimes when the scribe attempted to write across a fault, his letters would form only very badly, as, e.g., in Part I, folio 5b^o (Plate V), where the syllable *lā* (of *ilā*) is almost illegible; or they would not form at all, and the writer was obliged to abandon a half finished letter, and trace it anew on the other side of the fault, thus leaving a more or less extended gap in his line. Thus in Part I, folio 3a^r (Plate III) we have *eimi[ā]irō*, folio 3b^o, *jī[va]ritukāmah*, folio 5b² (Plate V), *ega[va]vāgācheha*, where the abandoned half-finished letters are indicated by being placed within brackets (*Journal*, As. Soc. Beng., 1891, Vol. LX, Part I, p. 137). Other examples are in Part II, fols. 7, 8, 22, 27, 29, etc. (Plates XII, XIII, XXIV, XXIX, XXXI), in Part III, folio 3 (Plate XXXVI), and in Part V, folios 2 and 6 (Plate XLIV and XLVIII), which show large uninscribed places. None of these defects is seen in the bark of Part VI, which is of the proper texture, and has been properly prepared.

The fact of the larger portion of the Bower Manuscript being written on birch-bark of such an inferior quality, of course, suggests the enquiry as to what may have been the cause of it. So much seems obvious that, as Kashmir and Udyāna are the lands of the birch and birch-bark, the scribes (on their number, see Chapter III) of the larger portion of the Bower Manuscript would not have had recourse to an inferior quality of bark, if at the time of writing it, they had not been, for some reason, in a position which made it impracticable for them to procure a supply of good bark. The most obvious explanation that suggests itself, of course, is that when they wrote their manuscript, they were already settled in Kuchar, where fresh birch-bark prepared for writing was not readily procurable, for which reason they were reduced to the necessity of using up what inferior portion remained to

⁴⁸ The blankness is not due to the spots: that need not have interfered, as may be seen from the obverse of folio 2 of Part III (Plate XXXVI).—The leaves and plates of Part V are wrongly placed; for "Leaf 6, Plate XLVIII" read "Leaf 1, Plate XLIII", and shift the others accordingly.

⁴⁹ The number 33 which is seen on the peeled off surface on Plate XXXIV is not original: it was inscribed by myself for guidance.

them of the store of birch-bark which they may have originally brought with them from their home in north-western India. But by the time that Part VI came to be written, a fresh supply of good and well-prepared bark had been procured.

One of the indications of the collective character of the Bower Manuscript, as has been stated, is the mode of pagination which it exhibits. For the leaves of each Part are numbered separately, so far as can be judged from the numbering where it is preserved. In Indian *pôthās* the practice is to number, not the pages, but the leaves; and the numbers are placed on the left-hand margin, either on the obverse or the reverse side of the leaf. In northern Indian manuscripts it is always the reverse side which is thus numbered, while in southern manuscripts, it is the obverse.⁵⁰ In Parts IV and V, the margins are so imperfectly preserved that it must remain uncertain whether they ever bore any numbers. The practice of numbering the folios, however, is so general in Indian manuscripts that, on the whole, the probability is in favour of its having once existed in those Parts at the time when the margins were intact. In Parts I—III and VII the margins of most leaves are fairly well preserved, and they show the usual pagination on the reverse side of the leaf, thus pointing to a northern locality as their place of origin. Part VI, the margins of which are well preserved, shows pagination throughout; and, what is noticeable, the numbers are on the obverse side of the leaves. That fact points to a southern place of origin, and this indication is confirmed by others which will be fully discussed in Chapter III.

The total of the existing leaves of the Bower Manuscript is fifty-one. But unfortunately the more important portion of it, Parts I—III, which treats of medicine, is incomplete. Part I ends quite abruptly with the fifth folio. How many more may have completed the text, it is impossible to conjecture from the context. The existing five leaves are numbered consecutively from 1 to 5. The obverse of the first leaf, as usual in Indian *pôthās*, is left blank. In the left-hand margin of the reverse of the third leaf, there appear, below the ordinary pagination 3, two other signs of doubtful value. If they are to be read as separate numeral figures, they might be 51; or if they are to be read as a single figure, it might be an imperfectly (*i.e.*, discontinuously) written 40 or 70. But in either case their purport is a puzzle.⁵¹ Part II also is a fragment; for it ends, apparently abruptly, with the 33rd folio somewhere in the fourteenth chapter. Moreover, the two final chapters, the fifteenth and sixteenth, which are announced in the introduction (verses 8 and 9), and which might have comprised five leaves, are entirely missing. In addition, the entire folios 20, 21 and 30, and the major portion of folios 16 and 17 are missing. Also, as previously stated (p. xix), smaller portions are missing, by fracture in folios 9 and 12, and by exfoliation in the reverses of folios 29 and 33. The total number of the existing leaves, inclusive of the two fragmentary folios 16 and 17, is thirty. In the case of most of these existing leaves, *vis.*, in folios 2—10, 12, 13, 15, 22—26, 31 and 32 (total 19), the ordinary pagination is fully preserved. It is only partially preserved in the five folios 16, 18, 19, 28, 29; and it is entirely lost, by fracture or exfoliation of the margin, in the six folios 1, 11, 14, 17, 27, 33. On folio 13 (Plate XVIII) there is an indistinct mark between the figures for 10 and 3, apparently the cancellation of another wrongly inscribed figure. The pagination is placed

⁵⁰ See the *Vienna Oriental Journal*, Vol. VI, p. 261, quoted in Chapter III, p. xxxi.

⁵¹ The figures, or figure, cannot well refer to the number of the corresponding verse in the text, as doubtfully suggested in note 57 on p. 5 of my edition.

as a rule, in the middle of the margin, but in folios 25, 31, 32 it appears in the top of the margin, facing the third or fourth line of the text; and it must have occupied the same position on folios 1, 11, 27, where the top of the margin is mutilated.⁵²

Part III, again, is a mere fragment. Its commencement is marked, as usual, by the sacred symbol of *ôû* on the obverse of the first leaf; but it breaks off abruptly on the obverse of the fourth leaf. But the noteworthy circumstance is that it breaks off, not at the bottom, but in the middle of that side of the leaf. This circumstance certainly suggests that the original scribe left off writing at that point, and never completed his work. Subsequently, the manuscript came into the possession of the writer of Part IV, who commenced the writing of that Part on what was then the blank reverse of the fourth folio of Part III. Ultimately the whole manuscript, that is, the unfinished Part III and the subsequently added Part IV, came into the possession of a third person, viz., the writer of Parts V and VII, who proceeded to write a remark of his own on the space left blank by the original writer on the lower portion of the obverse side of the fourth folio of Part III (Plate XXXVIII). This curious case will be the subject of further consideration with additional details in Chapter III (p. xxxv), where it will be shown that the writer of Part III must have written also Parts I and II. In connection with this latter circumstance the query suggests itself whether Parts I and II, no less than Part III, might not have been incomplete at the time when Part III came into the possession of the writer of Parts V-VII; that is to say, that already at that time Parts I and II extended no further than they do at present. It might be surmised that the scribe who made the copies of Parts I-III died before he had finished his task, and that his unfinished copies passed on, in turn, to the writers, or owners, of Part IV and Parts V and VII. There is nothing in the Parts concerned to decide one way or the other about this hypothesis, but in any case the hypothesis has no concern whatever with the losses of fols. 21, 22 and 30 of Part II, or the fractures (e. g., of fols. 15 and 17) and exfoliations which have been referred to. For injuries of an exactly similar kind are observable in every one of the Parts of the Bower Manuscript, with the exception of Part VI which is written on birch-bark of a superior and durable quality. All these injuries occurred at a date subsequent to the hypothetical transmission of Part I and II to its later owners. The second of the four folios of Part III is the only one which bears pagination. In the others the margin is defective.

Of Parts IV and V, which are two tracts on divination, the former is practically complete,⁵³ while the latter seems to be considerably defective (see Chapter VIII). Neither of them shows any pagination. As they are very small manuscripts, of five (strictly four and a half) and six folios respectively, it is possible that they never had any; but as the margins are more or less defective, the numbers may be lost; and this alternative seems more probable. The obverse of the first leaf of Part V is blank, just as in the case of Part I. Its reverse is inscribed only with the introduction to the treatise, which does not cover the whole of its surface. It bears only five lines, and there is a blank space left, sufficient for, at least, one additional line: all the other leaves have six or seven lines to the page.

Part VI, which is a treatise on a charm against snake bite, is complete. Being written on a superior quality of birch-bark, it is the best preserved portion of the Bower Manuscript. The left-hand margins of all its four folios are in good condition, and bear the pagination,

⁵² The numbers marked on the reverses of folios 17, 21 and 33 are not original, but were inscribed by myself for guidance.

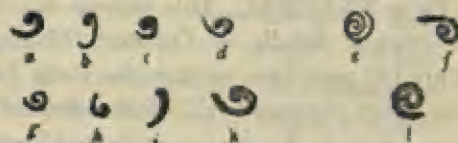
⁵³ On Part IV see my article in the *Journal*, A. S. B., 1892, p. 129.

1 to 4, on the obverse sides. The manuscript commences with the usual symbol for *ôṃ* on the obverse of the first leaf, and ends with the usual Buddhist terminal salutations and the double stroke (Chapter IV, p. xxxvii) on the top of the reverse of the fourth folio.

Part VII, which contains a portion of the same charm against snake bite (see Chapter III, pp. xxix and xxxv and Chapter VIII) is defective. It consists of two, much damaged, leaves, the first of which, on its reverse side, bears the pagination 1. The obverse has lost its inscribed surface layer of bark (p. xix), and with it the commencement of the charm. The pagination of the second leaf is lost with the broken-off margin.

Indian manuscripts, or records, as a rule, commence with some benedictory word such as *siddham*, success, or *svasti*, hail, or with the sacred particle *ôṃ*. The last mentioned is almost universally used at the present day. It may be either written in full, or indicated by a symbol. The latter takes the form of a spiral which may turn either to the right or the left (Fig. 8), and which is probably a conventional representation of the sacred *śaṅkha* or conch shell. The dextrorse form may be seen on the first leaf of Part I (Fig. 8a), Part II (Fig. 8b and c), and Part III (Fig. 8d), while the sinistrorse form appears on the first leaf of Part IV (Fig. 8e), and Part VI (Fig. 8f).

Fig. 8

Modes of writing *ôṃ*.

In Parts V and VII it is lost through the damage suffered by their first folios. In all the Parts, except the second, the symbol occupies the usual position facing the first line of the text; but in Part II it appears in the more unusual position, on the left-hand margin, opposite the third line of writing, exactly as it is seen in the two copper-plate grants of Ananta Varman, dateable probably in the sixth century A.D. (fig. 8g, h), shown in Dr. Fleet's *Gupta Inscriptions*, pp. 220 and 226, Plates xxxB and xxxiA. Among the dated northern Indian epigraphical records of the Gupta period, the earliest known examples of the dextrorse form of the symbol are those of the year 448-9 A.D. in a stone inscription of Kumāra Gupta I (Fig. 8i, see *ibid.*, p. 45, Plate viA), and of the year 493-4 A.D. in a copper-plate grant of Jayanātha (Fig. 8k, see *ibid.*, p. 120, Plate xvi). The earliest known example of the sinistrorse form occurs in a copper-plate grant of Mahāsādēvarāja, of an unknown though early date (Fig. 8l, *ibid.*, p. 198, Plate xxvii), and apparently, though mutilated, also in the Bodhgayā inscriptions, of 588 A.D. (*ibid.*, Plate xliA and B). Of course, these dates are not sufficiently numerous to settle the exact beginning and end of the period of the use of the two forms; but on the whole the sinistrorse form seems to be somewhat later in origin. Curiously enough, the symbol for *ôṃ*, in its dextrorse form, is found also on the obverse side of the 32nd leaf of Part II, on the left margin, opposite the second line of writing. How it comes to be there is, at present, not apparent.

As already observed, the typical Indian *pôthi* is provided with a hole for the passage of the binding string. At the present day, the hole is placed exactly in the middle of the leaves; and it has been so during many centuries past. In the Bower Manuscript the hole is placed in the left side, about the middle of the left half of the leaf; about 3½ inches from the left margin of the larger, and 2½ inches, in the case of the smaller folios. There are reasons to believe that the latter practice was that which prevailed in ancient India. In the old Indian copper-plate grants, the copper leaves are strung together on a copper

ring which passes through a hole in the left side of the leaves.⁵⁴ The oldest known copper-plates of this kind are those of the Kondaṃudi grant of Jayavarman (*Epigraphia Indica*, Vol. VI, p. 316) and the Pallava grants of King Sivaskanda Varman (*ibid.*, Vol. I, pp. 4-6, 397; Vol. VI, p. 84), which, on palæographic and linguistic grounds, must be referred to the second and third centuries A.D. respectively.⁵⁵ They have their ring-hole near the middle of the left half-side. They are all South Indian grants; and seeing that, as already pointed out, the oblong form of the earliest birch-bark *pôthis* of Northern India, as seen in the Bower Manuscript, is an imitation of the palm-leaf *pôthi* of Southern India, it may be concluded that the placement of the string-hole in southern manuscript *pôthis* was the same as in the southern copper-plate grants, and that the practice of placing the string-hole in the middle of the left half of the manuscript was adopted by the northern scribes from their southern brethren, whom, in fact, they imitated in the whole mode of fashioning the *pôthi*. All the earliest birch-bark manuscripts of the fourth and fifth centuries show their string-hole on the left side. But as birch-bark (as well as palm-leaf) is a more or less fragile material, the practice soon arose for the greater safety of the leaves, to make two holes, in the right and left halves, at corresponding distances from the right and left margins. The earliest known examples of this practice are presented in the Horiuzi Manuscript (see *Anecdota Ozoniensia*, Vol. I, Part III, Plate I) and the two Nepalese manuscripts of the Cambridge Collection, Nos. 1702 and 1409 (see Bendall's Catalogue, Plate I, Figs. 1 and 2), all of which probably belong to the sixth century. Still later, the practice arose of replacing the two holes by one hole in the middle of the leaves. The existence of this practice is recorded by Alberuni in the eleventh century, who says (Professor Sachau's Translation of Alberuni's India, Vol. I, p. 176) that "the Indians bind a book of palm-leaves together by a cord on which they are arranged, the cord going through all the leaves by a hole in the middle of each." The hole was not at first in the exact middle, but—probably a modified survival of the ancient practice—slightly more to the left, as seen, e.g., in the Nepalese manuscript No. XXI (Palæographic Society), which is dated in 1015 A.D. Still later, and in the present day, the hole appears in the exact middle of the leaves. The peculiar position of the string-hole, in the middle of the left side of the Bower Manuscript, therefore, is an evidence making for the extreme antiquity of the manuscript.⁵⁶

⁵⁴ This is the general practice; but there are exceptions in various directions. Thus exceptionally the hole is found in the bottom margin. A very old example, from the third century A.D., is the Pallava grant of Queen Chārudēvi (*Epigraphia Indica*, Vol. VIII, p. 144). Two other examples of the 7th century are the Chiplun grant of Pulikēsin II (*ib.*, Vol. III, p. 52), and the Nausāri grant of Śryāśraya (*ib.*, Vol. VIII, p. 232). Occasionally there are two holes at the bottom, e.g., in the 5th century the Ganesgad grant of Dhruvasēna I (*ib.*, Vol. III, p. 320) and the Māliyā grant of Dharasēna II (Fleet's *Gupta Inscriptions*, No. 38, p. 168, Plate xxiv); in the 7th century the Śaṅkhēḍa grants of Dadda III, (*Epigraphia Indica*, Vol. II, p. 20 and Vol V., p. 40), and the Nogawa grant of Dhruvasēna II (*ib.*, Vol. VIII, p. 192). Another early practice, which however appears to be limited to a particular Central Indian province, is to place the hole in the top margin of the plates, as in the Khōh grants of Hastin and other princes (Fleet's *Gupta Inscriptions* Nos. 22, 25, 27, 28, 30, 31, plates xiii, xv, xvii, xx). Lastly the hole is occasionally found on the right side. The earliest example of this appears to be the Paithān grant of the Rāṣṭakūtrakūṭa king Gōvinda III, of 794 A.D. (*Epigraphia Indica*, Vol. III, p. 106). But the overwhelmingly favourite practice throughout ancient India, and at all times, is to place the hole on the left side.

⁵⁵ These grants are written in Prākṛit, and the spelling in Jayavarman's grant (single for double consonants), as Professor Hultzsch has pointed out (*Epigraphia Indica*, Vol. VI, p. 316) is exactly like that in the records of the Andhra kings Gautamiṣṭha and Vaśiṣṭhīputra, whose dates are c. 117-137 A.D. The spelling in Sivaskanda's grants has double consonants, but the writing otherwise resembles that of Jayavarman's grant. Accordingly they can be dated, at most, about a century later.

⁵⁶ Revised from the statement in my *Report on the British Collection of Central Asian Antiquities* in Extra Number 1 to the *Journal, As. Soc. Beng.*, Vol. LXX, Part I, for 1901, pp. 7, 8.

Unfortunately it has never been recorded in what condition the Bower Manuscript was when it was received by Colonel Waterhouse in Calcutta in September 1890. When it came into my hands in February 1891, the leaves of the *pāthi* were enclosed between its two wooden boards, and a string run through them. In order to examine the leaves, I cut the string, and, on doing so, discovered that they were not arranged in their proper order, but that the leaves of the several parts were mixed up (see *Proceedings*, Asiatic Society of Bengal, 1891., p. 55). How they came into this state of disorder is not known. It does not seem probable that they were so originally when the manuscript was discovered by its Kuchari finders. The people who enshrined it in its receptacle in the stūpa may be assumed to have been able to read it; and they would not have enshrined it in a disorderly condition. But from the time of its discovery, it passed through the hands of, at least, four different persons, all of whom may be assumed with certainty to have cut or unloosed the string to satisfy their curiosity, and none of whom knew, or could read the characters. In the case of Babu Sarat Chandra Das this is certain; for he stated himself to Colonel Waterhouse who had first given him the manuscript to examine, that he had failed to decipher it (see *Proceedings*, As. Soc. Beng., 1890, pp. 222-3). Moreover two of the leaves were photographed (see *ibid.*, Plate III) by Colonel Waterhouse, before ever the manuscript came into my hands. It may, therefore, be concluded with good reason that the disorderly condition of the manuscript arose only in the course of its passage through the several hands; and it seems not at all improbable that the serious damage done to the folios 16 and 17 of Part II may be due to incautious handling by the original Turki finders in Kuchar. After each examination the leaves seem to have been bound together again by a string, whether the same original string or any other may be doubtful. That they were in this bound condition when they reached the hands of Colonel Waterhouse seems to be expressly stated in the original report, published in the November *Proceedings* of the Asiatic Society of Bengal (1890, p. 223).

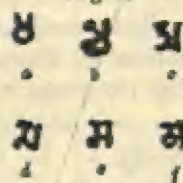
CHAPTER III.

THE SCRIPT, THE SCRIBES, AND THEIR USAGES IN THE BOWER MANUSCRIPT.

A glance at the Tables which illustrate this chapter shows at once that all the seven Parts of the Bower Manuscript are written in an essentially identical script. Considering the fact, which will be proved in the sequel, of a diversity of scribes, the identity of their script is strikingly shown by the occurrence of the same slight variations in the forms of such consonants as *k*, *r* and *s* (Table I), and such vowels as *i*, *u*, and *ī* (Table II, Nos. 5, 7-10). This script is that which prevailed in Northern India from the fourth to the sixth centuries A.D. (both inclusive). It is now generally known as the Gupta script, because its prevalence coincided with the rule of the (Early) Gupta Emperors in whose epigraphic records it is employed. Most of these records, inscribed during the period of the Gupta Empire, are collected in the third volume of the *Corpus Inscriptionum Indicarum*.⁵⁷ The facsimile Plates, accompanying that volume may be consulted for the purpose of comparing the script used in the Gupta records with that seen in the several Parts of the Bower Manuscript.

During the period of approximately three centuries of its prevalence the Gupta script shows two distinct types, a southern and a northern, their areas being separated by a line running in a north-easterly direction, roughly between N. Lat. 24° and 22°. At Mandasor (Lat. 24° 3'), Eran (Lat. 24° 5'), and Udayagiri (Lat. 23° 32'), there exist inscriptions, side by side, in both types of the script. From the dates of these inscriptions⁵⁸ it will be seen that, in every case, the records of the southern are earlier than those of the northern type,—a circumstance which points to the gradual advance southwards of the fashion of writing in the northern style. For practical purposes the most useful test for distinguishing the two types is the form of the letter *m* (Fig. 9). Here (a) shows the original form of the letter, in the so-called Aśoka script. Gradually the curve at the base was flattened, and the point of crossing shifted, more or less, to the right. In this form (b) the character was preserved in the southern type of the script. In the north-west of India the tendency of straightening the curves was more pronounced. At first it affected only the right side of the letter. This side was made quite straight; and in consequence thereof it was entirely severed from the crossing point. Thus arose the earlier northern Gupta form (c). Soon also the left side was straightened, producing the alternative form (d). In these two forms the character for *m* prevailed throughout the Gupta period (Table I), gradually spreading eastward over the whole of Northern India. From the second of the northern Gupta forms

Fig. 9.



Forms of the
letter *m*.

⁵⁷ Volume III, *Inscriptions of the Early Gupta Kings and their Successors*, edited by Dr. J. F. Fleet, C. I. E., in 1888. A few additional inscriptions, discovered after that date are published in the *Epigraphia Indica*. These two publications are quoted in the sequel as F. GI., and E. I. respectively.

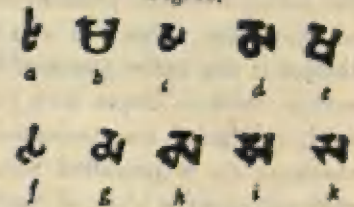
⁵⁸ Mandasor, northern type, F. GI., Nos. 33, 34, 35, dated c. 530-533 A.D., and southern type, F. GI., No. 18, dated 473, A.D. Eran, northern, F. GI., Nos. 19, 20, 36 dated 468, 484, 508 A.D., and southern, F. GI., No. 2, dated 370 A.D. Udayagiri, northern, F. GI., No. 61, dated 425 A.D., and southern, F. GI., No. 3, dated 401 A.D.

of *m*, developed, at a later time, the Nāgari form (*ṃ*), and its ringleted variety (*ṁ*), by the production of the right lateral below the base line.

The origin of the northern form of the Gupta *m* must be placed in the earlier half of the fourth century A.D. The starting point of the Gupta empire (Pāṭaliputra) was in the East. On the coins and in the records of Samudra Gupta the older form of *m*, with its curved sides (Fig. 9, *a b*) is still exclusively prevalent. But with his son Chandragupta II, who added the West to the empire, a total change takes place. All his coins and records show only the forms of *m* with straight sides (Fig. 9, *c d*). He commenced to reign about 375 A.D.; and he completed his conquest of the West about 395 A.D. His earliest known dated inscription of 407 A.D. (F.G.I., No. 7, p. 36) shows the straight-sided *m*. Its locality Gaḍhwā, Lat. 80° 38', is just within the eastern area. Another of his inscriptions, within the western area, at Mathurā, Lat. 77° 43', which also shows the straight-sided *m* (F.G.I., No. 4, p. 25, Plate iii A) is mutilated and hence undated; but it may be some twenty years older. Anyhow, the fact that the straight-sided *m* shows no signs of a gradual origination or introduction, but with Chandragupta's western conquests, all at once, entirely supersedes the older curved-sided form of *m* in the records throughout the northern portion of the Gupta empire, proves that, at the time of that conquest, it must have been the established and prevailing fashion of writing *m* in the north-west of India. The beginning and growth of that fashion in the North-west itself, therefore, may with good reason be placed in the earlier half of the fourth century, though, of course, in calligraphic records of a particularly ornate kind, such as the Bijayagaḍh inscriptions of about 372 A.D. (F.G.I., Nos. 58, 59, pp. 251-2, Plate xxxvi B. C.), the old form of *m* with its angular or curved sides, might tend to survive for some longer time. The only form of *m*, prevailing throughout the whole of the Bower Manuscript, in its calligraphically as well as cursively written portions, is the earlier of the two north-western forms, with its right side straight, but the left side twisted (Fig. 9, *e*; and Table I). So far, therefore, the graphic indications of the manuscript point to some time within the fourth century A.D. At any rate, they need not carry its date back of that century.

The northern type of the Gupta script, again, is divisible into two distinctly marked varieties, an eastern and a western. With regard to this division the most useful test letter is the character for the cerebral sibilant *ṣ*, as compared with the character for the dental sibilant *ś*. The original forms, in the Aśoka alphabet, of these two characters are shown in Fig. 10, *a* and *f* respectively. The form of the former was soon modified, as in (*b*), by closing up the lower semicircle. In the East, gradually that semicircle was made to bulge out on the left, as in (*c*), and finally reduced to a small ringlet, as in (*d*), while in the West it was simply more or less angularized, as in (*e*). On the other hand, in the case of the dental *ś* (*f*), its basal curve was angularized in the East, and at the same time its tail closed up to form a ringlet, as in (*g*), while in the West the whole character was angularized, a triangle taking the place of the ringlet, as in (*h*). The final result of these modifications was, in the East, to cause the forms of the cerebral and dental sibilants, (*d*) and (*g*), to resemble each other so closely as to make them practically indistinguishable, while in the West the forms of the two sibilants remained quite distinct. It may be added that the western form of the dental sibilant occurs in

Fig. 10.



Forms of the cerebral and dental sibilants.

TABLE I ALPHABET

	PART I		PART II		PART III		PART IV		PART V		PART VI		PART VII	
A	अ		आ		इ		उ		ए	अ	आ	अ	अ	
									य		अ	अ		
Ā	आ		आ		इ		उ		उ		अ		अ	
I	इ		इ		उ		ः		ः	ः	ः		ः	ः
Ī	ई		ई				ः		ः					
U			उ		उ		उ		उ		उ		उ	
Ū			उ								उ			
Ri	रि		रि		रि		रि							
E	ए	अ	ए		ए		ए		ए		ए		ए	
Ai			अ				अ							
O			उ								उ			
Au	अ		अ											
K	क	क	क	क	क	क	क	क	क	क	क	क	क	क
			क	क										
Kh	ख	ख	ख		ख		ख		ख		ख		ख	
G	ग		ग		ग		ग		ग		ग		ग	ग
Gh	घ		घ		घ		घ		घ		घ		घ	
N	न		न		न									
Ch	च	च	च	च	च	च	च		च		च		च	
Chh	छ		छ				छ		छ		छ			
J	ज	ज	ज	ज	ज	ज	ज		ज	ज	ज		ज	
Jh	झ	झ												
N̄	ञ	ञ	ञ	ञ	ञ		ञ	ञ	ञ					
T	ट	ट	ट		ट		ट		ट		ट		ट	
Tb	ठ		ठ		ठ									
P	प		प		प				प		प		प	
Ph	फ		फ		फ						फ			

TABLE I ALPHABET

	PART I		PART II		PART III		PART IV		PART V		PART VI		PART VII	
N	ॐ		ॐ		ॐ		ॐ		ॐ		ॐ		ॐ	
T	ॐ		ॐ		ॐ		ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	
Th	ॐ		ॐ		ॐ		ॐ		ॐ	ॐ	ॐ		ॐ	
D	ॐ		ॐ		ॐ		ॐ		ॐ		ॐ		ॐ	
Dh	ॐ		ॐ		ॐ		ॐ		ॐ		ॐ		ॐ	
N	ॐ		ॐ		ॐ		ॐ	ॐ	ॐ		ॐ	ॐ	ॐ	ॐ
P	ॐ		ॐ		ॐ		ॐ		ॐ	ॐ	ॐ		ॐ	
Ph	ॐ		ॐ		ॐ		ॐ		ॐ		ॐ			
B	ॐ	ॐ	ॐ		ॐ		ॐ	ॐ	ॐ		ॐ		ॐ	
Bh	ॐ		ॐ		ॐ		ॐ		ॐ		ॐ		ॐ	
M	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ		ॐ	
Y	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ						
	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ			ॐ	ॐ	ॐ	ॐ	ॐ	
R	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ		ॐ		ॐ	ॐ	ॐ	ॐ
	ॐ		ॐ		ॐ				ॐ		ॐ			
L	ॐ		ॐ		ॐ		ॐ		ॐ		ॐ		ॐ	
V	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ		ॐ	
S	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	
	ॐ		ॐ		ॐ						ॐ	ॐ	ॐ	
S	ॐ		ॐ		ॐ		ॐ		ॐ		ॐ		ॐ	
S	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	
	ॐ				ॐ		ॐ		ॐ		ॐ		ॐ	
H	ॐ		ॐ		ॐ		ॐ		ॐ		ॐ		ॐ	
H	ॐ		ॐ	ॐ	ॐ		ॐ		ॐ		ॐ		ॐ	
H				ॐ		ॐ								
H									ॐ		ॐ			
M	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ		ॐ		ॐ	

TABLE II VOWELS

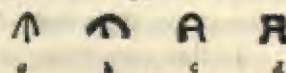
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several slightly differing variations, shown in (h), (i) and (k), none of which, however, affects its distinctive character of angularity.

The boundary of the western and eastern areas runs roughly along E. Long. 81°. At Kausambhī (Long. 81° 27') we have inscriptions in both varieties of the northern Gupta type side by side: the western variety in the Pāli land-grant (E.I., Vol. II, p. 364, l. 4, *yathais*), the eastern in the pillar inscription of Samudragupta, now in Allahabad (F. GI. No. 1, p. 1, Plate i), and in the Kōsam image inscription (F. GI. No. 65, p. 266, Plate xxxix C). Similarly, we find the western variety in the image inscription of Dêoriyā (Long. 81° 51', F. GI. No. 68, p. 271, Plate xl B), and close by, the eastern variety in the image inscription of Mankuwār (Long. 81° 52', F. GI. No. 11, p. 45, Plate xii A), and in the inscriptions at Gaḍhwā (Long. 81° 18'; F. GI. Nos. 7, 9, 64, 66, pp. 36, 40, 264, 267, Plates iv B, D, and xxxix B, D).⁵⁹ As the Nepal valley lies within the eastern area, all the Nepalese inscriptions at, or near, Kātmāndū (Long. 85° 71') exhibit the eastern cerebral *ṣ* (Fig. 10, d), but exceptionally they preserve the distinction of the two sibilants by using the western angular dental *s* (Fig. 10, h).⁶⁰ Throughout the whole of the Bower Manuscript, the two sibilants appear in the western variety of the northern Gupta type, as may be seen by referring to Table I. This fact limits the country of origin of the manuscript to some part of north-western India; and as will be shown in the sequel, the probability is that Parts I-III were written in the extreme north, and Parts V-VII, in the extreme south of that portion of India, or rather (p. xxxv) by scribes coming from those localities.

The western variety of the northern type of the Gupta script itself possessed two sub-varieties. The distinctive feature of these sub-varieties is their different way of writing the palatal sibilant *ṣ*, either with a curvilinear or a straight-lined top. The successive stages of development of the form of this sibilant are shown in Fig. 11. Originally, in the Aśoka script, it had the form (a). Gradually the medial perpendicular line assumed a slanting position as in (b), till finally, in the Indo-scythic period, in the Kushana script of the second century A.D., it became more or less horizontal, as in (c). Somewhat later, apparently in the early Gupta period, in the fourth century A.D., the alternative form (d) arose, which flattened the rounded top into a straight line. These two forms of the palatal, *ṣ* the round-topped and the flat-topped, however, were not restricted to a particular area, or a particular period of time. They existed contemporaneously during the Gupta period, and in the same common area. An instructive example is the group of Mandasôr inscription of Yaśôdharman (F. GI. Nos. 33, 34, 35, pp. 142, 149, 150, Plates xxi B, C, xxii), which were written by the same scribe, named Gôvinda (*ib.*, p. 146), about 533 A.D. He uses the flat-topped form of *ṣ* throughout his three records.⁶¹ On the other hand, the writer of the somewhat earlier Mandasôr inscription, of the time of Kumāragupta and of the year 473-4 A.D., uses the round-topped

Fig. 11.



Forms of the Palatal Sibilant.

⁵⁹ Exceptionally the eastern variety is found in two inscriptions as far west as Mīhrauli (Long. 77° 14' F. GI. No. 32, p. 139, Plate xxxi A), and Udayagiri (Long. 77° 50', F. GI. No. 6, p. 34, Plate iv A).

⁶⁰ See *Indian Antiquary*, Vol. XI, p. 163 ff. The two sibilants may be seen in juxtaposition in l. 11 (*hāryyṣhu sadvi*) of No. 3, p. 167.

⁶¹ Unfortunately, owing to the nature of the soft sandstone, on which they are incised, the angles of the letters are much eroded, thus obscuring somewhat their true forms, but the flat top is still well marked in several cases; e.g., in *śabda*, l. 6, and *śrī*, l. 7, of the complete pillar inscription (F. GI., p. 146-7) and in *śila* and *śatra*, l. 1 of the duplicate inscription (*ib.*, p. 159). In the better preserved inscription, on the harder slate tablet, the flat top of *ṣ* is quite distinct; e.g., in *śrī* l. 4 (*ib.*, p. 153.)

ś throughout (F. GI. No. 18, p. 79, Plate xi). Good examples of the use of the flat-topped ś are the cave inscription of Udayagiri (Lat. 23° 32', Long. 77° 50'), dated in 425-6 A.D. (F. GI. No. 61, p. 258, Plate xxxviii), and the stone image inscription at Msthurā (Lat. 27° 30', Long. 77° 43'; F. GI. No. 63, p. 262, Plate xxxix A), dated in 454-5 A.D. On the other hand, good examples of the use of the round-topped ś are the copper-plate land-grants of the Parivrajaka Mahārājas, at Khōh, Majhgawām, and Bhumarā (about Lat. 24° 25' and Long. 80° 45'; F. GI. Nos. 21-25, pp. 93-112, Plates xiii, xiv, xv B), which are dated between 475 and 529 A.D. These examples show that the two forms of the palatal ś were in use over the same western area, and during the same period of time.

But there is one point to be observed with regard to the use of the two forms of the palatal ś, which is of great importance in connection with the Bower Manuscript. The two ways of writing that ś are never confounded, nor do they ever occur promiscuously in the same epigraphic record. It is clear, therefore, that they mark two different styles of writing, each peculiar to a particular writer. They thus offer a test for determining the number of writers who were engaged in the production of the several Parts of the Bower Manuscript. As may be seen by reference to Table I, the round-topped ś is used exclusively in Parts I-III, while the flat-topped ś is, equally exclusively, used in Parts IV-VII. In Parts I-III, the flat-topped ś never occurs, nor does the round-topped ś ever occur in Parts IV-VII. It is inconceivable that the same person should have used habitually and exclusively one mode of writing ś in one set of manuscripts, and another in another set of manuscripts. It follows, therefore, that Parts I-III were written by a person different from the three persons who wrote Parts IV-VII; for as will be shown in the sequel (pp. xxix and xxxiii), on similar grounds, the two writers of Parts IV and VI must have been different persons from the writer of Parts V and VII.

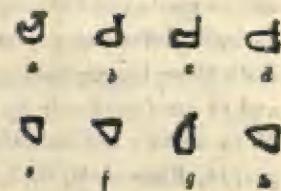
In this connection, as bearing on the question of the number of scribes, the following fact, which will be fully discussed in Chapter IV, must be noted. The modern form of the letter y, which originated in the northern area of the Gupta script, and which is found in Parts I-III, is entirely absent from Parts IV-VII. The latter make use exclusively of the old three-pronged form of y (Fig. 19), which persistently continued to prevail in the southern area. Also, another small point which distinguishes the scribes of Parts V-VII from the scribe of Parts I-III is worth noticing. It is the fashion of writing the character for the dental *th*. As may be seen in Table I, in Parts I-III that character has an upright position, while in Parts V-VII its position is more or less slanting. Though a small point in itself, it is worth noticing, because it marks the germ of a fashion of writing with a slant, which developed subsequently in the Eastern Turkestan settlement of Kuchar, and which is shown in Fig. 15, l. 2, (p. xxxii), and in Fig. 17, l. 3, c and d (p. xxxiv).

The peculiarities of writing above set out shown that there must have been no less than four persons engaged in the writing of the Bower Manuscript. In Parts I-III, the similarity of writing is, in all points so conspicuous that it is impossible to ascribe their production to more than one person. As to Parts V, VI and VII, it has been shown from their mode of writing the palatal ś, that they cannot have been written by the identical person who wrote Parts I-III. Moreover, it is practically certain that they must have been written by two different writers. That Parts V and VII are due to the same writer follows, as in the case of Parts I-III, from the conspicuous similarity of the writing. The case of Part VI may seem uncertain. There is superficial dissimilarity in its style of writing from that in Parts V and VII, but on the other hand, it must be remembered

that Part VI is written calligraphically, while Parts V and VII are written in an extremely cursive and careless fashion. Also, there is a not inconsiderable similarity of writing in the three Parts, which extends even to the use of the same signs of interpunctuation (see p. xxxix), parts V-VII having in this respect a common system differing from that in Parts I-III. Moreover, there is the fact that the same name Yaśamitra (i.e., Yaśōmitra) occurs both in the calligraphically written Part VI (fol. 4a, l. 6, ed. pp. 225, 230) and the cursively written Part VII- (fol. 2a, l. 3, ed. pp. 237-9). This name must be that of the votary, who either wrote the manuscript himself, or got it written for himself by a scribe. For, as the Japanese scholar, Dr. K. Watanabe, explains (*Journal, Royal Asiatic Society*, 1907, p. 263), it "was a custom in ancient China and Japan" that "a votary must recite his name" in the copy of a devotional work which he either wrote himself, or caused to be written for himself. On the other hand, there is the very significant circumstance that Part VI is paginated on the obverse side of its folios, while Part VII bore its folio numbers on the reverse sides (see Chapter II, p. xx). As in the case of the two modes of writing the palatal *ś*, it is hardly conceivable that the same person should have been in the habit of using two entirely different modes of paginating. It should, also, be observed that (see Chapter VIII) Parts VI and VII contain two different portions of the same tract, and (see Chapter II) greatly differ in their quality of birch-bark and state of preservation. The explanation which best accords with all these facts seems to be that a monk, called Yaśōmitra, wrote, or got written, for his own use, a copy of the protective charm, a portion of which now survives as Part VII. At a subsequent date, when that copy had become damaged, he got the damaged portion replaced by a new copy, namely the existing Part VI, on a fresh supply of superior bark, which a new arrival from India may have brought with him. Regarding the personality of Yaśōmitra, it may be surmised that he must have been a Buddhist monk of great repute for saintliness and learning. For the fact that the manuscripts were found in the relic chamber of the stūpa shows that they must have been the property of the person in whose honour the stūpa was erected; and to be accorded such an honour that person must have been a monk of acknowledged eminence. But whatever the exact number of writers may have been, the fact that Parts V-VII have so many peculiarities in common shows that the writer of Part VI must have been a native of the same country, or locality, in India as the writer of Parts V and VII. On the writer of Part IV, see below, p. xxxiii.

This introduces another important subject, viz., the native country of the writers of the several Parts of the Bower Manuscript. On this point the manuscript presents some very interesting evidence. In the first place, looking at Table I, a difference will be observed in the forms of the initial vowel *ē*. In Parts V-VII, the right side of the triangle projects, or juts out, beyond the apex. This projection is wanting in Parts I-III. On consulting the Tables III, IV and VII in Bühler's *Indian Palaeography* (in the *Encyclopædia of Indology and Oriental Research*), it will be found that the projection is peculiar to epigraphic records of the southern area of the Gupta script. The forms which obtained in the northern and southern areas respectively are shown in Fig. 12. The boundary line, as already stated, runs roughly in a south-easterly direction between N. Lat. 24° and 22°. The form of the jutting *ē* is shown in (a) from an inscription at Māliyā (about Lat. 21° 31', F. GI. No. 38, p. 164, Plate xxiv

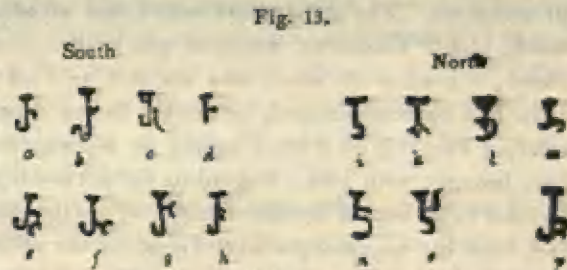
Fig. 12.

Forms of the initial *ē* in the northern and southern areas.

l. 26), well below the boundary line, in the southern area. The same southern form, from an inscription at Eran (Lat. $24^{\circ} 5'$, F. GI. No. 20, p. 91, Plate xii B, l. 1), is shown in (b). Eran is just on the boundary line of the two areas; and from another inscription (F. GI. No. 36, p. 158, Plate xxiv A, l. 2) at the same place comes the northern form without the projection, shown in (c). The same northern form, in two slight variations, is shown in (f) and (g), coming from the same place Khôh (Lat. $24^{\circ} 13'$, F. GI. No. 27, p. 121, Plate xvii, l. 9, and No. 28, p. 125, Plate xviii, l. 12). From further south come the Pallava and Kadamba forms, shown in (e) and (d); and from further north comes the Kushana form, shown in (h).

In the second place, there is the characteristic difference in the form of the vowels *u* and *û*, in the *aksharas*, or syllables, *ru* and *rû*, which are shown in the 7th and 9th traverses of Table II. In Parts I-III the short vowel *u* is attached to the foot of the consonant *r*, but in Parts V-VII to its middle. The long vowel *û* is indicated in Parts I-III, by adding a stroke above, but in Part VI, by adding a semicircle, to its own particular symbol for *ru* respectively. For Parts V and VII, unfortunately, no examples are available; but their agreement, in this respect, with Part VI may be presumed. On referring again to the Tables III and VII in Bühler's *Indian Palæography*, it will be seen that the forms used in Parts V-VII are peculiar to the southern, but those in Parts I-III to the northern area. Both forms, the southern and northern,

are shown in Fig. 13. Well within the southern area occurs the southern form (a) from the same above-mentioned inscription at Māliyā (about Lat. $21^{\circ} 31'$, F. GI. No. 38, p. 165, Plate xxiv, l. 3); also the similar southern form (b), from an inscription at Junāgaḍh (Lat. $20^{\circ} 31'$; F. GI. No. 14, p. 61, Plate viii, l. 29), as well as (c) from an



Forms of *ru* and *rû* in the northern and southern areas.

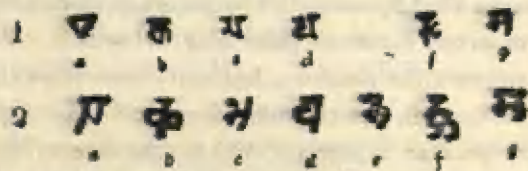
inscription at Rājim (Lat. $20^{\circ} 58'$, F. GI. No. 81, p. 295, Plate xiv, l. 12). The strictly southern character of these three inscriptions is proved by the fact that they all exhibit the distinctly southern form of *m* (Fig. 9 b). The Māliyā inscription (Plate xxiv, ll. 12, 16) shows the southern forms (e) and (f) of *rû*. On the other hand, we have, well within the northern area, the northern form (i) of *ru* in inscriptions at Kahaum (Lat. $26^{\circ} 16'$, F. GI. No. 15, p. 67, Plate ix A, ll. 8, 12), and at Indôr (Lat. $28^{\circ} 12'$, F. GI. No. 16, p. 71, Plate ix B, l. 6), and the similar forms (k) at Nāgārjunî (Lat. $25^{\circ} 0'$), (l) at Mandasôr (Lat. $24^{\circ} 3'$), and (m) at Mathurâ (Lat. $27^{\circ} 30'$; F. GI. Nos. 50, 33, 63, pp. 227, 147, 263, Plates xxxi, l. 1, xxi B, l. 8, xxxix A, l. 3). The northern form (n) of *rû* appears in an inscription at Udayagiri (Lat. $23^{\circ} 32'$, F. GI. No. 61, p. 259, Plate xxxviii, l. 7) and with a slight difference (o) at Bôdhgaya (Lat. $24^{\circ} 41'$, F. GI. No. 71, p. 277, Plate xli, l. 13). Both these inscriptions are on the border line; but on that line also the southern forms of *ru* and *rû* are found side by side with the northern. Thus at Khôh (Lat. $24^{\circ} 23'$) both forms of *ru* occur: the southern (d) (F. GI. No. 22, p. 103, Plate xiii, ll. 5, 11, and No. 25, p. 114, Plate xv B, ll. 7, 13), and the northern (i) (F. GI. No. 27, Plate xviii, ll. 6, 10; No. 28, Plate xviii, l. 6; No. 29, Plate xix A, l. 13, and No. 31, Plate xx, l. 6); and what is particularly to be noted, the southern form occurs here in conjunction with the northern form of *m* (Fig. 9 c). Similarly both forms of *rû* are seen at Mandasôr (Lat. $24^{\circ} 3'$), the

southern (*g*) (F. GI. No. 18, p. 82, Plate xi. ll. 10, 15) and the northern (*n*) (F. GI. No. 35, p. 153, Plate xxxii, l. 11). Moreover, there is a peculiar form *rū* (*h*) and (*p*) which substitute two parallel strokes for the southern semi-circle, and this form appears to be common to both areas; for it is seen in the south at Junāgaḍh (Lat. 21° 31'; F. GI. No. 14, p. 59, Plate viii, l. 10), as well as in the north at Bilsaḍ (Lat. 27° 33'; F. GI. No. 10, p. 44, Plate v, l. 11).

In the third place, there is the striking difference in the use of the two forms of the letter *y*, the old and the modern. In Parts I-III, as already observed, and as will be explained in detail in Chapter IV, the modern form of *y* is used optionally with its older three-pronged form; while in Parts V-VII that three-pronged form is used exclusively. The modern form of *y* originated in the north, and its use never spread to the south.⁶²

The obvious conclusion suggested by the foregoing evidence is that the persons who wrote Parts V-VII were natives of some place lying within the southern area. In the case of Part VI, at all events, this conclusion is confirmed by the other significant fact that the folios of Parts VI are numbered on their obverse sides (see Chapter II, p. xx). For, as Bühler has pointed out in the *Vienna Oriental Journal*, Vol. VII, p. 261, the practice of numbering the folios on their obverse side is a peculiarity of Southern India. We have a good example of this practice, of a very early date, in the copper-plates of the Pallava king Śivaskanda Varman, and the Kōṇḍamudi Plates of Jaya Varman, a contemporary of the Andhra kings Gautamīputra and Vāsiṣṭhiputra, who reigned about 113-137 A.D. These copper-plates may be seen in the *Epigraphia Indica*, Vol. I, pp. 4-6, Plates I-V., Vol. V, p. 86, and Vol. VI, p. 315. At the same time, the place whence the writers of Parts V-VII came must have been somewhere near the border line of the two areas. This is indicated by the circumstance that the southern forms of *ḍ*, *ru* and *rū* are employed in conjunction with the northern form of *m*, exactly as in the inscriptions, above mentioned, at Eran and Khōh, both of which places lie on the border line. While the writers of Parts V-VII appear to have come from some place near the southern limit of the northern area, the person who wrote Parts I-III must have come from somewhere near its northern limit, that is to say, from Kashmir or Udyāna. This is indicated by the occurrence in Part II (fol. 27a, l. 11) of the peculiar Śāradā form of the letter *k* (Table I, No. 2 in Traverse 2). The Śāradā script is peculiar to Kashmir, where it originated directly from the Gupta script in the course of the seventh century, and where it is still current, almost unchanged, to the present day. The Śāradā forms of those letters which enter into the present enquiry are shown in the lower line of Fig. 14.⁶³ The upper line shows the corresponding letters in the script of the Horiuzi Manuscript, which was written in the first half of the sixth century (*Anecdota Oxoniensia*, Vol. I, Part III, p. 64). Its script, therefore, was the immediate predecessor of the Śāradā script. The

Fig. 14.



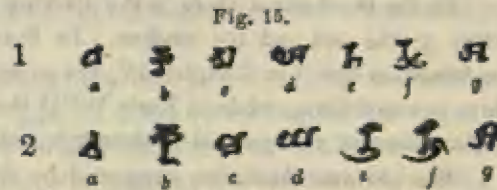
Letters of the Horiuzi and Śāradā scripts.

⁶² There is a further point of difference between Parts I-III and Parts V-VII. It concerns the shape of the initial vowel *i*. This point, however, is not decisive of locality, and will be discussed in the sequel, p. XXXVI.

⁶³ These letters are extracted from a birch-bark manuscript in Śāradā characters which was presented to me by Dr. Stein in December 1898.

appearance of the Sârada form of *k* (Fig. 14, l. 2 b) in Part II is quite exceptional. It occurs only once. Its use would seem to have grown gradually more frequent, till it finally became distinctive of the Sârada script. On the other hand, that script selected for itself (Fig. 14, l. 2g), from the two co-existent forms of the palatal *ś*, the flat-topped variety, which is used in Parts V-VII.

The forms which the Gupta script developed on its transference to Central Asia are shown in Fig. 15. That figure shows the same series of letters (as in Fig. 14) in the forms which they assumed in manuscripts written in the Buddhist settlement at Kuchar. They are extracted from Parts II and IX of the Weber Manuscripts, which are shown in Plate I, Fig. 2, and Plate III, Figs. 3-5,



The upright and slanting scripts of Kuchar.

in my *Report on the Weber Manuscripts* in the *Journal of the Asiatic Society of Bengal*, Vol. LXII, Part I (1893), pp. 1-39. It will be seen from Fig. 15 that there are two distinct varieties of the Kuchari script, the second variety (lower line) showing an appreciable slant which is absent from the first variety.⁶⁴ The latter variety, it will be noticed, resembles much more closely the upright *ductus* of the Gupta script as it was current in northern India, and as it prevails in the Bower Manuscript. The latter Manuscript, as has been explained in Chapter II, is written mainly (*i.e.*, all except Part VI) on inferior and damaged birch-bark, which circumstance suggests its having been written by Indian emigrants on remnants of the store of birch-bark which they had brought with them from India.⁶⁵ On the other hand, the Weber Manuscripts are written on paper, which was the ordinary writing material of Eastern Turkestan. The two varieties of the Kuchari script, shown in these manuscripts, were current contemporaneously; for they were all dug out from the Qutluq Urdâ stûpa in the vicinity of Kuchar (see Chapter I). How the divergence of the two varieties arose is not known. What the difference of the writing material, however, suggests is that the manuscripts on birch-bark, such as the Bower Manuscript, were written at an earlier date than the manuscripts on paper. The former probably were written by immediate immigrants from India, who still possessed some store of birch-bark, their native writing material, while the latter were written by their descendants, or by native Kuchari converts who naturally made use of the paper of their own country. In this connection a curious point may be noticed. The upright variety (upper line in Fig. 15) conserves the Southern Indian fashion of writing the syllables *ru* and *rû* (*e* and *f*), the jutting *ê* (*a*), and (though not quite distinctly) the flat-topped *ś* (*g*), all of which fashions are peculiar to Parts V-VII of the Bower Manuscript. On the other hand, the slanting variety (lower line of Fig. 15) conserves the northern fashion of writing *ru* and *rû* (*e* and *f*), and the round-topped *ś* (*g*) of Parts I-III, with which, however, it combines the southern

⁶⁴ The two varieties are shown also in Fig. 17, where the difference of the upright (*c*) and slanting (*d*) forms of *ṇ* and *śh* (in ll. 1, 2, 3, respectively) is very clearly marked.

⁶⁵ This conclusion is suggested also by the circumstance mentioned earlier (p. xxix) that the letter *śh* is written in Parts V-VII with an approach to the slant which distinguishes one of the two varieties of the fully developed Kuchari script.

jutting *e* (*a*). This combination, in the slanting variety, of different Indian fashions of writing seems to suggest that that variety originated among the native Kuchari converts to Buddhism, while the upright variety persisted among the Indian Buddhist immigrants and their descendants. For it should be noticed that both the Sâradâ script, which originated from the Gupta script, and the Horiuzi script, which occupies a position intermediate between the Gupta and Sâradâ, agree with the upright variety of the Kuchari script in conserving the southern Gupta fashion of writing *ê*, *ru* and *râ*, and *î*.⁶⁰ The considerable modification in the forms of some letters, such as *m* and *y* (Fig. 15, *c* and *d*), presupposes a not inconsiderable interval of time to have passed since the introduction of the Gupta script into Eastern Turkestan and the production of the Bower Manuscript. As the date of the latter is probably to be referred to the second half of the fourth century (see Chapter V), the date of the Weber Manuscripts may be placed within the sixth century, or possibly a little earlier.

It has been stated (*ante*, p. xxix) that Part IV must have been written by a person different from the two writers of Parts V-VII, as well as from the writer of Parts I-III. From the latter the writer of Part IV differs (see Plate I) by the use of the flat-topped *î*, as against the use of the round-topped *î* in Parts I-III. From the former he differs by the use of the plain *ê*, as well as the northern *ru* and *râ*, as against the jutting *ê* and the southern *ru* and *râ* of Parts V-VII. Further from both, the writer of Parts I-III as well as the writers of Parts V-VII, the scribe of Part IV differs in the following striking points. In the first place, he writes the initial vowel *ri* in a way quite peculiar to himself. In Parts I-III it is written quite differently, as may be seen from Table I. In Parts V-VII that vowel does not happen to occur at all. It is altogether a character of very rare occurrence. From the epigraphic records of India, as may be seen by a reference to the Tables in Bühler's *Indian Palæography*, it appears to be altogether absent. In the Horiuzi Manuscript (first half of the sixth century) it resembles rather the character for the vowel *a*. In the Sâradâ script, also, it has a very simple form, though quite different from that in Part IV. The full data for an effective comparison, therefore, are not available. All that can be said is that the form of the initial vowel *ri*, which is seen in Part IV, stands quite by itself.

In the second place, in Part IV the initial vowel *î* is written quite differently from Parts I-III on the one side, and from Parts V-VII on the other. The character for the vowel *î* is made up of three dots arranged triangularly (see Table I). With the exception of Part IV, all the Parts agree in placing the dot, which forms the apex, below the two dots which form the base of the triangle; with this difference, however, that in Parts V-VII the apicular dot is made plain, while in Parts I-III it is furnished with a tail. But in part IV the arrangement of the dots is exactly reversed; the apicular dot has the superior position. The evidential value of this difference, however, is not quite assured.

⁶⁰ The line of graphic descent, on the present evidence, appears to be as follows: The southern Gupta travels in the fourth century northwards, through Kashmir and Udyâna, to Kuchar in Eastern Turkestan. In Kashmir it develops gradually, through the Horiuzi script (6th cent.), into the Sâradâ (7th cent.). In Kuchar it develops, contemporaneously with the Horiuzi stage, into the slanting variety of the Kuchari script (6th cent.).

In the Gupta script, as seen in the epigraphic records of India the initial *i* is made in a great variety of forms. These are shown in Fig. 16. The four forms (a-d) are peculiar to the southern area of that script. The two forms (e and f) and the four forms (g-h) prevail mainly in the eastern and western portions respectively of the northern area. Finally the form (i) has no definite habitat: it is found in the inscriptions at Nirmand in the north-west (Lat. $31^{\circ} 25'$, Long. $77^{\circ} 38'$), in Pahladpur in the north-east (Lat. $25^{\circ} 26'$, Long. $3^{\circ} 31'$), and at Junâgadh in the south-west (Lat. $21^{\circ} 31'$, Long. $70^{\circ} 36'$). Moreover in the Nirmand inscription it occurs side by side with the proper western form (i); and in the Pahladpur record it alternates with the form (g). Considering that the record at Nirmand comprises only sixteen lines, and that at Pahladpur even only a single line, the suspicion obtrudes itself that the reversal of the position of the apicular dot in the form (i) may be a mere error of writing. Whether or not its occurrence in Parts IV of the Bower Manuscript is due to a scribal error, it is not possible to say with certainty, seeing that the initial (i) occurs only once in that Part; but the possibility of its being due to a mere error cannot be disregarded, and it is this possibility which detracts from its evidential value. For the purpose of further comparison there are added in Fig. 17 the forms of initial *i* in the Horiuzi (a) and Sâradâ (b) scripts, as well as in the Kuchari-script of the upright (c) and slanting (d) varieties. In order to bring out more clearly the marked distinction between the two varieties (c) and (d) of the Kuchari script, the forms of *n* and *th* are added in the second and third lines.

Fig. 16.

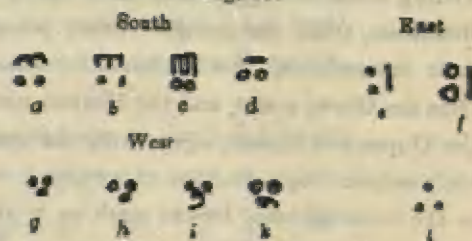
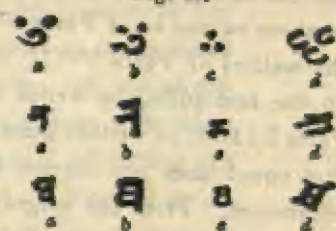
Forms of the initial vowel *i*.

Fig. 17.



Letters of the Horiuzi, Sâradâ, and Kuchari scripts.

In the third place, the general appearance of the writing in Part IV conveys the suggestion that it was done with a brush rather than a stylus or reed-pen. Thus the curious flourish, or jerk, at the bottom of the right limb of the letters *g* and *t*, and of both limbs of *i* (see Table I), suggests the brush. The apparently similar curves, to be seen in the letters *g*, *t*, *n*, *i* in Parts V-VII, are obviously due to a different cause, viz., to the tendency towards continuity in cursive writing.⁶⁷ The stylus, or reed-pen was the usual instrument of the Indian scribe, and with it undoubtedly Parts I-III and V-VII are written. The brush was peculiar to the Chinese scribe, and hence would naturally be the instrument used in the Chinese province of Eastern Turkestan. And though an Indian immigrant into Kuchar might conceivably abandon his accustomed instrument and take to that of his adopted country, it is—on the assumption that Part IV was really written with a brush—practically certain that it must have been written by a native of Eastern Turkestan, or perhaps by a Chinese Buddhist monk, resident in the monastery of the Ming-ol of Qum Turâ.

⁶⁷ An instructive example of an exactly similarly written cursive *i* may be seen in the Tōramâṣa stone inscription at Kura, in the word *mahîa* in *Epigraphia Indica*, Vol. I, p. 240, l. 12.

Irrespective of the details which distinguish the three styles of writing in Parts I-III, Parts V-VII, and Part IV respectively, it is impossible not to be impressed by the pronounced difference in the general appearance of the writing in those three portions of the Bower Manuscript. This circumstance leads to a further observation. On the blank space of the obverse of the leaf on which Part III ends, there is inscribed a remark, the exact purport of which is, at present, not intelligible. But it is obviously written by the same hand that wrote Parts V and VII. For, in addition to the general appearance of samencas, there occur in the remark those forms, previously explained of the letters *ś* and *th*, which are peculiar to the writer of Parts V and VII. On the reverse of that same leaf there is inscribed the commencement of Part IV. On the obverse of the third leaf of Part IV (see Plate XL), there is seen, written between the fourth and fifth lines, the brief remark *na sashaya*. This interlinear remark, too, is clearly in the handwriting of the scribe of Parts V and VII; for it comprises the peculiar *ś* and *y* of those Parts; for example, as will be seen by reference to Table I, the left-hand stroke of *y* of the remark curls to the left as in Parts V and VII, while in Part IV it curls to the right. The conclusion that may be drawn from the existence of the two remarks in the positions in which they occur is that after Parts I-III had been written, they passed into the hands of the writer of Part IV who began his writing on the blank page of the last leaf of Part III. Afterwards Parts I-IV passed into the hands of the writer of Parts V and VII, who added his explanatory remark to the final page of Part III, and his brief complementary remark on the third leaf of Part IV. Probably it was also he who put all the Parts together, and enclosed them as a collective manuscript between a pair of wooden boards. It may be suggested that the remark appended to the end of Part III, if we only understood it, might refer to the monastic order or rank of the writer of Parts I-III. The interlinear remark in Part IV only adds a phrase which had been inadvertently omitted by the original writer.

The results of the foregoing enquiry may be summed up as follows. The writers of Parts I-III and Parts V-VII were natives of India who had migrated to Kuchar. They, no doubt, were Buddhist monks, and these, as is well known, were often in the habit of travelling, or migrating, for missionary or other purposes, into Foreign Parts. To judge from their style of writing, the scribe of Parts I-III originally came from the northern, and the two scribes of Parts V-VII from the southern part of the northern area of the Indian Gupta script. But the fact that they use birch-bark as their writing material shows that the country, from which more immediately they migrated to Kuchar, must have been Kashmir or Udyāna; and the quality of the birch-bark which they use suggests that they wrote their respective parts of the Bower Manuscripts after their settlement in Kuchar, when their store of birch-bark had run short. Parts V and VII probably were written about the same time as Parts I-III. The latter apparently were never completed. They passed, in their incomplete state, into the hands of the writer of Part IV, who would seem to have been a native of Eastern Turkestan, or perhaps of China. From him Parts I-IV passed into the hands of the writer of Parts V and VII, who added the two remarks above referred to. Part VI was written at a subsequent date by a fourth scribe on a fresh supply

of well prepared birch-bark leaves, since received from India, for the purpose of repairing the damage suffered, in the mean time, by part VII. In fact, that fresh supply may have been brought from India by the fourth scribe himself who may have been a later immigrant. All four writers must have been residing in a monastery near Kuchar. But the ultimate owner of the whole series of manuscripts, whose name appears to have been Yaśomitra, must have held a prominent position in that monastery. For his collective manuscript was contained in the relic chamber of the memorial stūpa at the *Ming-oi* of Qum Turā, which would appear to have been built in his honour.

CHAPTER IV.

THE SCRIPT, THE SCRIBES, AND THEIR USAGES IN THE BOWER MANUSCRIPT—*Contd.*

It remains to notice a few miscellaneous points connected with the script and the usages of the writers of the several Parts of the Bower Manuscript.

(i) THE NUMERAL SIGNS ; see Table IV.

These are the old signs of the original Indian system of notation, anterior to the discovery of the "value of place" and the invention of the cypher. That system made use of twenty signs, viz., nine for the units, nine for the tens, one for hundred, and one for thousand. Thirteen from among these twenty signs occur in the Bower Manuscript; viz., the nine unit figures, and the figures for 10, 20, 30 and 50. The figure for 50 is doubtful: it might be the figure for 70 (see Chapter II, p. xx). Most of the thirteen figures occur in the numbering of the leaves of the several Parts, a few also in the text of Parts II, IV, and V. The series of three numbers which occur in the divination treatises of Parts IV and V have to be understood, not as possessing any "value of place," but simply as being three successive unit figures. For example, the series 444, in Part IV, p. 192, which repeats three times the unit figure for 4, is to be read, not as four hundred, forty, four, but simply as four, four, four. It indicates that the die is thrown three times, (see p. X CI) so that each time its face shows the number four.

(ii) MISCELLANEOUS MARKS ; see Table V.

A variety of marks occur to indicate various purposes, such as interpunction, correction, or a *lacuna*.

(1) INTERPUNCTION (see Traverses 1 and 2 of Table V for Parts I-III, Traverses 1-3 for part IV, and Traverses 1-4 for Parts V-VII). The writers of the Bower Manuscript observe no consistent system of interpunction. As to Parts I-III, which are written, practically entirely, in verse, the writer, as a rule, makes no use of any sign to indicate the ends of half or whole verses. Occasionally he marks the end by a rather wider interval, as, e.g., the end of verses 121 (Part II, p. 32, fol. 5b, l. 5), 223 (*ib.*, p. 38, fol. 8b, l. 4), 353 (*ib.*, p. 44, fol. 11b, l. 7), etc. This mark, however, is very unsafe, as the writer often disperses his writing, mostly by reason of the defects of the birch-bark (as in Part II fol. 12b, l. 2; Part III, fol. 2b, l. 3), or on account of the spread of a conjunct consonant (as in Part III, fol. 2b, l. 3); but sometimes apparently from mere caprice (as in *shadin* on l. 6 of Part II, fol. 12b). If he does use a sign, it is either the well-known double stroke, or a comma laid lengthwise, or a ringlet, simple or complex.

(a) *The Double stroke*.—The modern Indian usage is to mark the end of the half-verse by a single vertical stroke, and the end of the full verse by a couple of vertical strokes. As regards the single stroke, in Parts I-III, the end of the half-verse is never marked, unless it coincides with the end of a formula, or of a section; and in that case, it is marked—if it is marked at all—with any of the marks of a full-verse. The single stroke, accordingly, is never found. The double stroke always, except as above noted, marks the end of a full verse. In Part I, it occurs not infrequently; in fact, in the forty-three verses of the initial treatise on garlic, it is used regularly, the only exceptions being verses 29 and 35. In the subsequent portion it occurs very rarely: only in verses 51, 59, 60, 67, 70, 73, 79-88, 97, 98, 100, 116, 128. In Parts II and III, also, it occurs very rarely. Thus, in Part II, in verses

1, 2, 3, 20, 149, 336; after which it grows rather more frequent, on account, apparently, of the shortness of the formulæ; thus in verses 427, 444, 446, 459, 462, etc. In Part III, it occurs only in verses 52 and 61. But as will be noticed presently, it is used occasionally also in conjunction with the ringlet.

(b) *The Comma*.—Another sign which is occasionally used to mark the end of a full verse is a comma, laid lengthwise. It exactly resembles the figure for the numeral one, and is, no doubt, identical with it. In Part I it is found at the end of verses 49 and 71; and in Part II at the end of verses 5, 45, 108, 130, 178, 372, 488, 619, 642, etc. In Part III it does not occur. In addition to marking the end of a full verse, it is also used occasionally in other ways. Thus, in Part I, fol. 36⁴⁻⁵ (p. 5), it marks the prose notice *bhavati ch-âtra*, preceding the fiftieth verse, and in Part II, fol. 29a³ (p. 70) it marks the prose notice *tatra âlôkaḥ*. Again in Part II, fol. 4b⁶ (p. 32), it separates the two parts of a colophon.⁶⁸ Sometimes, again, it marks merely a superfluous blank space; see below under *Lacuna*, p. xlii.

(c) *The Ringlet*.—The third sign which exceptionally marks the end of a full verse, is a ringlet with a central dot, or a ringlet containing a still smaller ringlet the circumference of which is studded inside with (usually) three dots. The former probably represents the sacred *chakra* (*dharmachakra*), or Wheel of the Law, the latter, the sacred *padma* or White Lotus; and in the sequel these two signs will be referred to as the wheel and the lotus. The latter is found only in Part II, while the wheel is common to all three Parts. An example of the lotus, used as the mark of the end of a full verse, occurs in Part II, fol. 2a¹⁰ (p. 28), and of the wheel, in fol. 19b⁷ (p. 57), where they mark the end of verses 38 and 639 respectively. As a rule, however, the lotus and wheel are used as the special marks to indicate the end of a passage which is longer than a verse, such as a whole formula, or a whole chapter, or the whole of a subject. Accordingly they constitute the special marks of the colophon, which is marked off, afore as well as after, by them from the surrounding text. Thus we have two lotuses to mark the colophon of the first formula in Part II, fol. 1a⁸⁻⁹ (p. 26), and of the first chapter in Part II, fol. 4b⁶⁻⁷ (p. 32).⁶⁹ Similarly we have two wheels to mark the colophon of the *siddhanta* formula, in Part II, fol. 18a³ (p. 54), and of a formula for boluses, in Part III, fol. 3b⁵⁻⁶ (p. 184). Sometimes the two signs are combined; thus the sequence wheel, lotus is found with the colophon *tryûshaṇaḥ*, in Part II, fol. 6a¹ (p. 34), and the reversed sequence lotus, wheel, with the colophon *âvina-rasâyanaḥ*, *ib.*, fol. 24a¹ (p. 61). Also other variations occur, such as placing one of the two signs between a couple of double strokes, as in the *ârdâla-chârṇa* colophon in Part II, fol. 3b⁴ (p. 30), or placing a double stroke after both signs, as in the *môḍaka* formula in Part III, fol. 3b⁵⁻⁶ (p. 184). Exceptional cases, however, are found in which the colophon is marked only by one sign, or by no sign at all. An example of the latter case is the *pañcha-gavya* colophon in Part II, fol. 5b¹¹ (p. 34). Examples of the former case are the colophons after verse 613, in Part II, fol. 19a² (p. 56), and after verse 782, *ib.*, fol. 24a³ (p. 61), which are marked only by a lotus after them.⁷⁰

The signs of the wheel and the lotus, however, are also employed to indicate the end of a formula, or of a subject matter, whenever a colophon is dispensed with. Examples are, in Part I, the wheel in fol. 3b⁷, 5b¹⁰, where with verse 120 the subject of hair dyes closes.

⁶⁸ This colophon combines those of a formula as well as of the chapter; and the two portions are separated by the comma mark.

⁶⁹ The colophon after verse 804, in part II, fol. 24b¹⁰ (page 63) is no real exception, because it is misplaced, and should stand in the preceding line. The misplacement is marked by the two crow's feet; see below on *Correction*, p. xlii.

In Part II we have the lotus, reinforced by the comma as well as the double stroke, after verse 10, in fol. 1a⁶, to mark off the end of the introduction to the treatise. Similarly after verse 24 on fol. 1b⁵, we have the lotus by itself to mark the end of a series of short formulæ (verses 18-24), and after verse 39a, on fol. 2b¹, to mark the end of a single short (unnamed) formula (verses 38-39a). And after verse 737, on fol. 22b⁵, we have the wheel to mark the end of the long *pippali-vardhamāna* formula (vv. 716-737). In Part III a disk is frequently used in this way, to mark the end of a formula; especially in fol. 3b, where it occurs not less than seven times, in ll. 1, 2, 3, 5, 7, 8, 9.

Of particular interest is the circumstance that the lotus and wheel appear to be used, in Part II, also to indicate glosses, which the author of the *Nāvanitaka* himself seems to have added to the extracts from old authoritative works of which his own work is mainly composed. Thus on fol. 27a³ (page 67) there is, after verse 879, the obvious gloss *prāchīnikā pāṭhā* enclosed between two wheels (see note 418, on page 162). On fol. 33b^{5.6}, verse 1109 is enclosed between two wheels, and its purport suggests its being a gloss (see note 490 on page 180a). In the similar case of verse 929, on fol. 28b³ (p. 69), which the author had at first omitted to mark as a gloss, he (or rather a subsequent copyist) has afterwards, on revision, inserted the lotus mark between lines 2 and 3. The same practice is observed in Part III, which may be a work by the same author. Here, on fol. 1b¹, the lotus marks what appears to be a gloss; so also on fol. 3b¹. It will be observed that both passages, thus marked, are in prose.

In Parts V-VII, the usage with regard to marks of interpunction is much the same as in Parts I-III. But in addition we meet with three signs which exactly resemble our modern comma, semicolon, and full stop. The comma occurs, e.g., in Part V, fols. 2b³, 3b⁴, 5a³, twice even in a reversed position on fols. 3a¹ and 5a³ (see Table V, Traverse 3), in Part VI, fol. 2b⁴, and in Part VII, fol. 1a⁵. But it is probable that the comma is really identical with the more usual lengthwise-comma (the numeral one), of which it is an exaggerated cursive form. The semicolon, practically identical with the well-known sign of the *visarga*, occurs, e.g., in Part V, fols. 6a¹ and 6b⁵, and in Part VII, fol. 4a⁶. The full-stop, or single dot, is found, e.g., in Part V, fols. 2a³, 3a⁵, 6b⁵, in Part VI, fols. 1b⁵, 3a¹, and in Part VII, fols. 2a⁴ and 2b⁴. As to the ordinary signs, the double stroke does not happen to occur in Parts V and VII, in which the comma, either erect or prone, regularly takes its place. In Part VI the double stroke is found in a slightly modified form, embellished with a hook to the left at the top of the first stroke, as in fol. 4a⁵, or with a hook to the left and right respectively at the top of the two strokes, as in fol. 4b. The lengthwise-comma, or the numeral one, as already observed, is used regularly in Part V, e.g., in fols. 1a^{3.5}, 2a³, etc. So also in Part VI, e.g., in fols. 1b⁴, 3a⁶, and in Part VII, e.g., in fol. 1a⁵. Neither the wheel nor the lotus is found in any of Parts V-VII. In their place Part V uses the spiral which is the conventional representation of the sacred *śākhā*, or conch shell, as in fol. 5b¹. Once in fol. 3a⁵, this spiral is accompanied by the lengthwise-comma. It will be observed that the same spiral appears also in the remark which is appended to Part III (Plate xxxviii, obv.), and which, as has been previously (pp. xxi and xxxv) stated, was written by the scribes of Parts V-VII.

In Part IV the usage with regard to interpunction is as follows. The double stroke is not uncommon. In its plain form it occurs, e.g., in fols. 2a¹, 3a³; but it is often accompanied with the lengthwise-comma, or numeral one, as in fols. 2a³, 3a², 4a¹, and occasionally this comma is drawn across the double stroke, as in fols. 3a¹, 3a⁵. Moreover in the case of

fol. 3a⁵, the double stroke is hooked, just as in Part VI, fol. 4a⁵. Once, fol. 2a¹, the crossing comma is found also with a single stroke, imitating the form of a regular cross. In equally frequent use, however, is the lengthwise-comma, or numeral one; it occurs, e.g., in fols. 3a², 3b¹, 4a³, 5a³, 5b², etc. The spiral, in a rather imperfect form, and enclosed between a pair of double strokes occurs in fol. 1b², to mark off the introduction to the treatise. The same spiral, in much better form, is used also for the benedictive *ōm* at the beginning of the treatise, in fol. 1b¹ (see Chapter II, p. xxii).

(2) CORRECTION;—see Table V, Traverse 4 for Parts I-IV. For the purpose of correcting an error in the text, when a letter, or a word, had to be cancelled or altered or inserted, or when a misplacement had to be indicated, certain signs are used in the Bower Manuscript. In Parts I-III one of these signs consists of two, or more, minute strokes attached to the top of a letter or a word. Thus in Part I, fol. 3b³, the word which originally was written *prōktō* is altered to *prōktaḥ*, and this alteration is indicated by attaching two minute strokes to the cancelled vowel *ō*. Similarly on fol. 2a⁷, the syllable *ka* of the word, which was originally written *hasanā*, is marked to indicate that it is to be read *ya* (*yavanā*). Again on fol. 4b⁴, the vowel *ā* of *samustām* has been cancelled by the attachment of minute strokes. In Part II there occur the following examples. On fol. 7b, the final *ē* of line 10, which is written in faint ink, is cancelled because it is superfluous, being repeated at the beginning of line 11; so also on fol. 14a the superfluous final *nā* of *madhūnā*. On fol. 16a⁴ one of the duplicated *cha* of *chandasā* is cancelled; so also, on fol. 19a⁶ the vowel *ē* of *drighe*, and on fol. 19b³, the syllable *na*. On fol. 28b⁴, the mishapen final *d* of *kkādēd* has been cancelled, and replaced by a well-made *d*. In all the above-mentioned cases the double stroke indicates cancelment. The following are examples of its indicating an insertion. In Part I, fol. 4b², the original writing had only *mē ṇu*, which is false for *mē śriṇu*. The omitted syllable *śri* is inserted, in very faint ink, between ll. 9 and 10, and the place of insertion, between *mē* and *ṇu*, is indicated by two minute strokes placed above those two syllables. Similarly in Part II, fol. 12a⁴, a double stroke indicates the omission of the syllable *va*, which is inserted, just below, between ll. 4 and 5. But there exist also numerous cases, in which these corrective double strokes are applied for no apparent reason. They all occur in Part II. Thus we find them attached to *yō* of *yōgō* on fol. 6b⁷, to the *visarga* of *syuḥ* on fol. 10a⁴, to *llā* of *bhallātaka* on fol. 10b⁶, to *rā* of *rāsānā* on fol. 11a², to *hu* of *bahūś* on fol. 12b⁷, to *cha* of *chatur* on fol. 15b⁴, and to *ima* of *aimari* on fol. 31a⁵. On fol. 5b⁶ even the whole word *pāḥām* is thus marked. In all these cases, the existing text is correct (see note 45 on p. 33, and note 87 on p. 93). They are so numerous that they cannot be attributed to inadvertence on the part of the scribe. He must have had some reason for attaching the mark; but what it can have been is not intelligible, unless it be that he wished thus to indicate the correction of something (an error, or a *lacuna*, or the like) in the original from which he was copying.

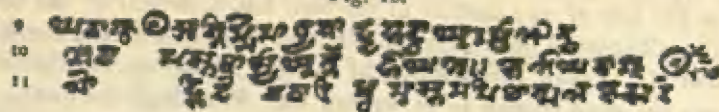
Another sign, found in Part II, is a cross. On fol. 15a¹¹ it indicates the omission of a passage which is supplied in the bottom margin. Its use on fol. 2a³, where it appears to be duplicated, is not intelligible.

A third sign, found also in Part II, is the so-called *kāka-pada*, or crow's foot. It resembles the mathematical sign of the "root." It may be seen on fol. 12b¹⁰, where it indicates the omission of a portion of the mark of the colophon, viz., lotus plus double stroke. The omission is supplied in the margin below. Unfortunately the margin is damaged, but the traces that remain can be completed from the same mark⁷⁰ on fol. 22a.¹

⁷⁰ The traces are not those of a damaged syllable, as suggested on p. 46, n. 99. The verse 393, beginning with *madhuka* is complete. Precisely the same mark (lotus and double stroke) is supplied interlinearly on fol. 28b³.

We have the same crow's foot on the margin of fol. 13b, where it refers to the cancelled numeral four. On fol. 24b, it occurs in duplicate, at the end of line 10, apparently to indicate the misplacement of the preceding colophon, which should stand on line 9. It will be observed that there are twenty-four formulæ for the preparation of various kinds of gruel (vv. 785-802). To these is appended a charm for insuring long life (*āyus*) in vv. 803-4, and after it comes the colophon *Bhêlê gavâgû*. This colophon indicates that the verses preceding it are composed by Bhêla (or Bheḍa). As a fact, the charm (vv. 803-4) is found in the existing unique Tanjore Manuscript of the *Bhêḍa Saṃhitâ* (see note 376, p. 154), in the seventh chapter of its *Sûtra Sthâna* which deals with *indriyôpakramanîya*, that is, with general rules for the preservation of bodily and mental health. But the formulæ for the gruels (vv. 785-802) cannot be traced in it owing to its mutilated condition. Seeing, however, that formulæ, practically identical, are found in the *Charaka Saṃhitâ*, in the second chapter of its *Sûtra Sthâna*, it may rightly be assumed that the missing formulæ would be found in the second chapter of the *Sûtra Sthâna* of the *Bhêḍa Saṃhitâ*, if the text of the latter were intact.⁷¹ It is further to be observed that the charm has no particular connection with the gruels. It and they are mentioned in two different and quite unconnected chapters of the *Saṃhitâ*, and the charm may be used with any kind of treatment in order to render the latter effective for long life, while the gruels of Bheḍa are specifically referred to in the colophon. One naturally expects, therefore, to find the colophon, not after the charm, but immediately after the gruels, that is, after verse 802. If it is replaced in its proper place, in l. 9 of fol. 24b, it will be seen that it comes to stand between two wheels (see Fig. 18). And in fact, the existing

Fig. 18.



A corrective marginal note.

misplacement of the colophon appears to be indicated by the scribe, or his reviser. He placed two crows' feet, together with the numerals 2 (one above the other) on the margin against the wheel mark of the colophon. The figure 2 would refer to the second chapter of the *Sûtra Sthâna* which contains the formulæ for the gruels, while the figure 7 would indicate the seventh chapter of that *Sthâna* as the source of the charm; and the reviser's object in thus identifying the two different sources of the gruels and charm would be to indicate that the colophon which speaks of the gruels (*gavâgû*) of Bheḍa really belongs to the verses 785-802 which contain the formulæ for those gruels.

Exceptionally the correction of a letter is made in the text itself. Thus, in Part I, fol. 2a² the second letter *r* of *durjjara* is written across the letter *y* of the original reading *durjjaya*; see note 10 on p. 12.

In Parts V-VII only one of the above-mentioned signs, viz., the cross, is found. It occurs twice in Part V, fol. 5a², where it marks the omission of the syllable *na*, supplied below, between lines 2 and 3; and *ibid.*, fol. 6b², where it marks the insertion of the syllable *tê*, written on the margin, below the cross. Otherwise corrections are not marked by any sign. For example, in Part VI, fol. 3a², the omission of the syllable *na* of *upananda*, which is supplied below, between lines 4 and 5, is not marked by any sign; neither is the inter-linear supply of *s*, *ibid.*, fol. 5a. Similarly the supply of the syllable *kta*, on the margin of fol. 3a, in Part VI, is not marked. The meaning of this syllable is quite unintelligible; for the suggestion made, in note 18, p. 224, is not tenable. Possibly it may really be the badly drawn and hence cancelled numeral three; though this explanation, too, is not satisfactory. Occasionally blundered readings are defaced; as in Part VI., fols. 2b¹ and 3b⁶, and in Part VII, fol. 1a².

⁷¹ See also *Journal, Royal Asiatic Society*, 1909, pp. 869-70; and *ib.* 1910, p. 830.

In Part IV, fol. 3a, the interlinear insertion of the phrase *na saṁśaya*, which was made by the scribe of Parts V-VII, appears to be marked by a double stroke in a slanting position in line 4. But the interlinear insertions of the syllables *pi* on fol. 4a² and *bha* on fol. 5a² are not marked by any sign. On fol. 5b², the correction of *tri* to *ṭri* is made in the text itself. The favourite method, however, of correcting blundered letters is to deface them, as on fols. 3a², 3a³, 5b⁴, where false numerals are defaced. See, also fols. 4a² and 5a⁵.

3. LACUNA;—see Table V, Traverse 5, for Parts I and II. The existence of a *lacuna* is indicated in the Bower Manuscript by means of dots. The number of these dots is equal to the number of the missing syllables, when the latter is very small. Thus in Part I, fol. 2b⁴, there are three dots to indicate the absence of three syllables, which the scribe was unable to read in his original, but which can now be identified as *pañcha cha* from the *Bhēḍa Saṁhitā*, the source of the *Nāvanitaka* (see *Journal*, Royal Asiatic Society for 1909, p. 858); also below, Chapter VI, p. lvii. Similarly, *ibid.*, fol. 7b¹, there are two dots to indicate the absence of the two syllables *para* (see note 61, p. 36). Also *ibid.*, fol. 4b³, there are two dots indicative of the loss of two syllables, the identity of which, however, for the present, is unknown (see note 38, p. 32). The case is slightly different with Part I, fol. 3b⁷. Here we have a blank space, partly filled with four dots and enclosed between those double strokes which are the usual mark of the end of a full verse (see *ante*, p. xxxvii). Here the dots indicate the loss of an indefinite portion of the text in the original manuscript, from which the scribe prepared the existing copy of the treatise.

Dots, however, serve to indicate not only a *lacuna* in its proper sense, i.e., a gap in the text, but also such gaps, or blank spaces, in the inscribed surface of the leaf as are due, not to the loss of any portion of the text, but to defects of the birch-bark, or to other causes. (See Chapter II pp. xviii, xix.). Thus we have three dots at the end of the first line of fol. 7b in Part II, to show that nothing of the text is missing, but that the surface of the birch-bark was not good enough to be written on. The single dot on the third line of the same page serves the same purpose; so also the two single dots on the tenth line of fol. 5b, though here their presence is not due to badness of the surface of the bark, but probably to a real *lacuna*, which the scribe could only partially fill up with the word *chitraka*, for which reason he put dots into the superfluous blank spaces on either side of that word.

Besides dots, also the lengthwise-comma, or numeral one, is frequently used to mark a superfluous blank space. Thus in Part I, fol. 1b¹¹, Part II, fols. 4a¹¹, 7a¹¹, 7b¹⁰, 8b⁵, 11b⁹, 25b¹², 29b¹¹, 31a¹⁰, 31b¹, 9¹¹, etc. In Part II, at the beginning of the fourth line of fol. 15b, the comma indicates a blank space due to the conjunct letter above it.

Finally a more or less lengthy serpentine line is used for the same purpose of indicating a superfluous blank space. It occurs, e.g., in Part II, fols. 6a¹⁻¹¹, 8b¹, 14a¹.

(iii) ABBREVIATION.

The practice of abbreviating a word is found only in Part II, and only in application to the two words *śloka* and *pāda*, when they are connected with numbers expressed by figures. The word *śloka* serves as the name of any kind of verse, not of the technically called *śloka* only; and *pāda* is the name of a quarter verse. The two names often occur in the colophon of formulae, to indicate the number of verses, or parts of verses, of which they consist. When so used, they are usually abbreviated to *ślō* and *pā* respectively. Thus we have *ślō* 2 on fol. 3a⁸ (p. 29), and *ślō* 11 *pā* 1 on fol. 5a⁴ (p. 32), etc. Twice, however, *śloka* is written in full, viz., *ślokā* 14 on fol. 18b⁵ (p. 55), and *śloka* 5 on fol. 19b² (p. 57). As part of the text, of course, it is always written in full; thus in verse 498, on fol. 15b⁸, we have *ardha-śloka-samāpanāḥ*, and in the prose note introducing verse 947, on fol. 29a³, we find *tatra ślākāḥ*.

(iv) SCRIBAL ERRORS.

Lapses in writing occur not infrequently in the Bower manuscript. In Parts V and VII, which are written with evident carelessness, they are particularly numerous. In a

comparatively small number of cases they have been corrected by some revising hand, and some of these corrected errors have been already referred to in the Section on Correction (p. xl), and others will be referred to below in the Section on Revision (p. xlv). The subjoined list refers only to uncorrected errors, and comprises only selected examples. For many others the footnotes to the transcribed texts may be consulted.

The most frequent error consists in a miswritten letter or syllable. Thus in Part I fol. 1b³ (p. 1) *guṇa* is written for *gapa*; fol. 3a² (p. 4) *Suśrutaigraṃanāḥ* probably for *Suśrutaikamanāḥ* (i.e. *Suśruta ēkamanāḥ*); fol. 3b³ (p. 5) *prathamaneṣu* for *pradhameṣu* etc. In Part II, fol. 2b⁴ (p. 28), *phalāni* for *palāni*; fol. 6b³ (p. 35), *arpaṇē* for *armaṇē* (possibly only a badly written *m*); fol. 24b² (p. 63), *mādhyaḡād* for *māvyagād*; fol. 29b⁴ (p. 71) *tōyē* for *tōyaṃ*, etc. In Part IV, fol. 2a² (p. 193), *nishpala* for *nishphala*; fol. 3a¹ (p. 194) *sahayā* for *sahayais*, etc. In Part V, fol. 3a¹ (p. 205) *saichā* for *paichā*; fol. 3a² (p. 205) *upastitāṃ* for *upasthitāṃ*; fol. 4a⁵ (p. 206), *puva* for *pūva*, etc. In Part VI, fol. 2a⁵ (p. 223), *śulāṃ* for *śūlāṃ*, etc. In Part VII, fol. 2a⁶ (p. 237), *kṛitayāṃ* for *kṛitāyāṃ*, etc.

Or, a letter or syllable is misplaced. Thus in Part I, fol. 4b⁵ (p. 7), *śavakara* for *śavaraka*, fol. 5a¹ (p. 8), *pilpaṃ* for *pipluṃ*. In Part II fol. 10a¹ (p. 41), *krōṇchāṇadāni* for *krōṇchādānāni*. In Part V, fol. 5b⁵ (p. 207) *īvaraṃ* *īvaraṇa* for *īvara-saraṇaṃ*. In Part II, fol. 24b¹⁰ a whole colophon is misplaced (see *ante*, p. xli).

Or, a letter or syllable is omitted. Thus in Part I, fol. 2b⁶ (p. 3), *prayujān* for *prayujājan*; fol. 3a¹ (p. 4), *munir* for *munibhir*. In Part II, fol. 1a⁵ (p. 26) *chatum* for *chaturdaśam*; fol. 10a¹ (p. 41) *gundānāṃ* for *gundrāṇāṃ*; fol. 19a¹ (p. 57), *jivani* for *jivanīyāni*. In Part IV, fol. 2a¹ (p. 192), *tataṃ* for *satataṃ*. In Part V, fol. 2b³ (p. 204), *vichēhi* for *vichintēhi*; fol. 4a⁵, *samusthita* for *samupasthita*. In Part VI, fol. 3b⁵ (p. 224), *ugādhipēna* *kālēna* for *uragādhipa-kālēna*; fol. 4a^c, (p. 225), *kṭayē* for *mukṭayē*, etc. Occasionally even a half-verse, or a whole verse, or a whole clause, is missed out; see note 244, p. 126, note 459, p. 171, and note 2, p. 226.

Or, a superfluous letter or syllable is inserted. Thus, in Part I, fol. 1b⁶ (p. 1), *ōṭkshit°* for *ōkshit°*. In Part II, fol. 4b⁷ (p. 32), *nā nāmā* for *nāmā*; fol. 24b³ (p. 63), *mā* at the beginning of the line. In Part IV, fol. 1b⁵ (p. 192), *balamamantarāṃ* for *balamantarāṃ*. In Part V, fol. 1a³ (p. 203), *tataḥstēshāṃ* for *tatustēshāṃ*; and exactly the same superfluous *visarga* in Part VI, fol. 1a² (p. 222), *daharāḥ staruṇāḥ* for *daharastaruṇāḥ*. A superfluous *anusvāra* is rather common; e.g., in Part I, fol. 1b⁶ (p. 1), *jvalāṃti* for *jvalanti*; Part III, fol. 3a¹ (p. 183), *śrīpamānti*; Part IV, fol. 3a⁶ (p. 194), *sarvaṃthā*; Part V, fol. 1a¹ (p. 203), *māṃnusha*; Part VI, fol. 1a¹ (p. 222), *dārūṃni*; fol. 2a¹ (p. 223), *arōchakaṃ*, *m* for *arōchakam*; in this case there is a superfluous comma in addition to the superfluous *anusvāra*. Once there occur also two superfluous verses, see note 114, p. 98.

Occasionally there occur entirely wrong words, such as *pushṭe* for *pakti* in Part I, fol. 3a² (p. 4); *sa-patrān* for *sa-pushpān*, in Part II, fol. 22b² (p. 59); *dvitīya* for *tritīya*, in Part IV, fol. 5a¹⁻² (p. 195); and 243 for 343, in Part V, fol. 3a² (p. 205). But the responsibility for these errors possibly lies rather with the original writers of the treatises than with the scribes who copied them in the Bower Manuscript. Still such grossly blundered readings, as *kāśyēshānō* in Part I, fol. 3a⁷ (p. 4), and *chashkashu* in Part V, fol. 2a¹ (p. 204), are probably to be laid to the charge of the scribes, who may not have been able, or careful enough, to read correctly their original. They are certainly responsible for such curiosities as those referred to in note 32, p. 3, and note 77, p. 7.

In this connection a brief reference may be made to certain defects due to the inferior quality of the birch-bark on which the scribes wrote rather than to the scribes themselves. To this category belong half-formed letters, such as may be seen, e.g., in Part II, fols. 7a⁷, 18b⁴, 22a⁷, and in Part V, fol. 2b¹ (see note 21, p. 193); and want of evenness, or continuity, in the lines of writing, as, e.g., in Part II, fol. 11a, lines 5 ff.

(v) REVISION.

When the Bower Manuscript was exhibited for the first time in Calcutta in November 1890, it was stated (Proceedings, As. Soc. Beng., p. 223, Journal, As. Soc. Beng., 1891, Vol. LX, p. 137) that "the writing was entirely in black ink." So it no doubt appears at first sight; but on closer examination letters and syllables are met with occasionally, which are written in a very light, or faint, ink. The significance of these light-inked letters, namely, that they indicate corrections, is disclosed by such cases as the following. In Part I, fol. 46^a, the original writing in black ink was *mē nu*, which is false for *mē ēṛ nu*. Here the omitted syllable *ēṛi* is inserted below, in the interlinear space, in almost invisible light ink, and the proper place of insertion between *mē* and *nu* is marked by two minute strokes, also in light ink, above those two syllables. Again, *ibid.*, fol. 36^a, the original black-ink writing was *prōktō sa*, and this is, as it should be, corrected into *prōktaḥ sa*, by inserting a *visarga* and cancelling the top-strokes of the vowel *ō* by two minute strokes, all in light ink. Similarly, *ibid.*, fol. 36^b, an originally omitted *visarga* is inserted in *ajaraḥ*. But not infrequently corrections are found made also in black ink. Thus, in Part I, fol. 46^a, we have the original reading *sa-mustām*, which is adjectively made to qualify the preceding noun *triphalūm*, corrected into *sa-mustam*, which, just as the following *sa-śarkkaraṇ* (derived from *sa* and *śarkkarā*), now qualifies the succeeding noun *āchhyōtanam*. Here both, the original as well as the correction, are in black ink. Again, *ibid.*, fol. 5a¹, (p. 7), the original blundered reading *muṣṣā* is corrected to *mūṣṣā*, both in black ink, though another error is left uncorrected; for the fully correct reading should be *mūṣṣā*. *Ibidem*, fol. 46^b, there is another instructive example. The original reading *pralēpaiḥ* is corrected to *pralēpaḥ*, both again in black ink. As a matter of fact, the noun *pralēpa* refers to both, the preceding instrumental plural *ardha-rūpaiḥ* and the succeeding nominative singular *śaṅpra-yōjyaḥ*, and may grammatically be made to agree with either. This correction, as well as the correction of *sa-mustam* in black, and of *prōktaḥ* in light ink, shows that the revisers, whoever they were, were familiar with the technicalities of the Sanskrit language. Equally instructive is an example *ibid.*, fol. 5b^a. Here we have the word *lavaṇ-ōpētair* entirely in black ink with the exception of the syllable *ṇō* which is in light ink. It would seem that the original writer in black had left a gap for that syllable, which for some reason he had omitted to write, and that a subsequent reader of the treatise supplied the missing syllable *ṇō* in light ink. The fact that the original writer should have failed to recognize the compound word *lavaṇ-ōpētair*, and to supply such an obvious complement of the word *lavaṇ*, compounded with *upēta*, seems to suggest that he must have been a rather illiterate person,—a conclusion which the occurrence of the numerous other errors (see Section iv, p. xlii) in the original writing tends to confirm. A further instructive example occurs in Part II, on fol. 7b. Here the last word of the tenth line appears to have been originally *dāpayē* in black ink. To this the reviser added in light ink the terminal *t* (*dāpayēt*),⁷² and after it, the vowel *ē*, as if to commence a fresh verse. Then noticing his mistake—for as a matter of fact the vowel *ē* which commences the new verse does stand at the beginning of the eleventh line—he cancelled the superfluous *ē* by two minute double-strokes.

The foregoing remarks are concerned, in the main, with Parts I-III of the Bower Manuscript. The general conclusion suggested by the observed facts is that those Parts were originally written in the usual black Indian ink by a somewhat illiterate writer, and that some of his numerous errors were afterwards corrected by a more intelligent user of the manuscript at different times, sometimes in black ink, at other times, when for some reason good black ink was not at hand, in diluted ink.

⁷² Both forms *dāpayē* and *dāpayēt*, are correct; only the former is Prākṛit, while the latter is Sanskrit,—another indication that the reviser was a person familiar with Sanskrit.



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